El Dorado Irrigation District

2010 Update

United States Bureau of Reclamation Five–Year Water Management Plan

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Revised July 2012

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Revision History

In May 2012, United States Bureau of Reclamation staff requested revision of this Plan to reflect information related to the CVP and Warren Act Contract service area only. This document, dated July 2012, reflects those changes. In sections where the information could not be reflective of the Contract service area, notes have been provided to clarify that the information is District-wide.

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Section 1: Description of the District

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This Five-Year Water Management Plan (Plan) has been prepared for water used pursuant to Central Valley Project (CVP) Water Service Contract No. 14-06-200-1357A-LTR1 and Warren Act Contract No. 06-WC-20-3315 (Contract water) for Municipal and Industrial purposes. A map of the Water Service Contract area is provided in Appendix A. Although the Contract water service area goes as far east as Cameron Park, due to current infrastructure restrictions, water supplied through these two contracts serves the area of El Dorado Hills (Zone 2) as shown on the District-wide Service Area Map in Appendix B.

A. History

The El Dorado Irrigation District (District or EID) was organized in 1925 under the Irrigation District Law. The District provides water to more than 100,000 people for municipal, industrial, and irrigation uses, as well as, wastewater collection and treatment, and recycled water services to meet the growing needs of our customers. As such, the District is one of the few California districts that provide a full complement of water-related services. The Board of Directors is comprised of five members elected by the citizens in five geographical divisions within the District service area.

1. Date District formed and original size

District formed – October 5, 1925
Date of first Reclamation contract – 1953
Original size – 31,560 acres
Current Year – 2010

2. Size, population, and irrigated acres

District-wide
Size – 220 square miles
Population served – 110,000 persons
Irrigated acres – 4,100 acres

Contract Water Service Area
Size – 35 square miles
Population served – 62,000 persons
Irrigated acres – 0 acres

3. Water supplies received - 2010

Water Source	Total District-wide (Acre-Feet)	CVP and Warren Act Contract (Acre-Feet)
Federal urban water – CVP Contract	5,554	5,554
Federal agricultural water	0	
Local Surface Water – Project 184	8,424	
Local surface water – Jenkinson Lake	20,844	
Local Surface Water – Warren Act Contract	855	855
Groundwater	0	
Banked water	0	
Transferred water	0	
Recycled water	2,116	
Total	**37,793**	**6,409**

Source: Section 5, Tables 1 and 3 and 2010 Diversion Report

4. Annual entitlement under each right and/or contract

Source	Acre-feet per year	Contract/Right	Restrictions
Folsom Reservoir	7,550	CVP Water Service Contract No. 14-06-200-1357A-LTR1	Shortage Policy of 25% cutback
Project 184	15,080	EID owned Pre-1914	40 cfs delivery rate
Jenkinson Lake	33,400	EID owned L11835 & L11836	23,000 ac-ft/yr (operated as a two-year supply)
Project 184	17,000	EID owned Permit 21112	none
Ditches/Weber Reservoir	4,560	Warren Act Contract No. 06-WC-20-3315	3,000 ac-ft during dry years

Source: 2010 Urban Water Management Plan
Note: Table provides a listing of all water sources District-wide

5. Anticipated land use changes

El Dorado County governs land use policies and changes under its adopted General Plan and the District has no governing authority or influence.

6. Cropping patterns

N/A

7. List major irrigation methods

N/A

B. Location and Facilities

1. Incoming measurements methods and locations

Location Name	Physical Location	Type of Measurement Device	Accuracy
Folsom Reservoir	El Dorado Hills WTP	Meter	±3%
Slab Creek	In-stream	Pressure Transducer	±8%
Weber Creek	In-stream	Pressure Transducer	±8%
Hangtown Creek	In-stream	Pressure Transducer	±8%
Weber Dam	In-stream	Pressure Transducer	± 8%

2. Agricultural conveyance system

N/A

3. Urban Distribution System

There are 336 miles of potable waterline in the Contract water service area, most of which is asbestos cement or PVC.

Source: EID GIS/Drafting Services Section

4. Storage facilities

In the potable water system, where Contract water is served, the District operates 1 water treatment plant, 15 storage tanks, and 3 pumping stations.

5. Outflow locations and measurement methods

N/A

6. Agricultural spill recovery system

N/A

7. Agricultural delivery system operation

N/A

8. Restrictions on the contractor's water sources

Source	Restriction	Cause of Restriction	Effect on Operations
Folsom Reservoir	Drought/dry year	USBR CVP M&I Water Shortage Policy	Reduces annual supply from Folsom Reservoir
Various ditches	Seasonal diversions	Water rights season of use	No effect – planned for

Note: CVP and Warren Act Contract water only

9. Proposed changes or additions to facilities and operations for the next 5 years

The District anticipates the following changes to facilities over the next five years:

- Waterline replacements
- Lining/piping of open channel earthen ditches
- Forebay Reservoir enlargement
- Acquisition of additional water rights
- Storage tank replacements
- Water treatment plant chlorine conversion from gas to liquid bleach

No changes to operations are anticipated over the next five years.

C. Topography and Soils

1. Topography of the District and its impact on water operations and management

The District-wide service area is generally bounded by Sacramento County to the west and the Pollock Pines area to the east and ranges from 500 to more than 4,000 feet in elevation. For the area served by Contract water, elevations range from 500 to 1,600 feet in elevation. Although Contract water can be supplied as far east as Cameron Park, due to current infrastructure restrictions, water supplied through these two contracts serves the area of El Dorado Hills (Zone 2) as shown on the District Service Area Map in Appendix B.

The District is primarily located in two major watersheds, the South Fork American River in the north and the North Fork of the Cosumnes River in the south, and is hydrologically split by the Placerville Ridge and Highway 50 between these two drainage watersheds. Although the rivers drain east to west, the minor streams trend northwest toward the American River and southwest toward the Cosumnes River. The ridges generally trend in a west to east direction.

2. District's soils associations

The lower foothills range from 500 feet along the El Dorado/Sacramento County line to the 1,600 foot elevation at Cameron Park. These vast changes in elevation create a varied water system operation. Water supplied in the west from Folsom Reservoir is pumped from the 400 foot elevation to as high as the 1,150 foot elevation.

Two main physiographic regions occur in the District: 1) The lower and middle foothill, and 2) The mountainous uplands. The Contract water service area, which is located in the lower and middle foothill region, is characterized by rolling hills with rock outcroppings common. This region is composed of five soil associations, all having well drained loams weathered from slates, schists, igneous rock, and granite. This area makes up approximately one half of the District, with Auburn/Argonaut Soil association making up half of it.

3. Limitations resulting from soil problem

N/A

D. Climate

1. General climate of the district service area

The District is located in a region of sunshine in the summer, moderate to heavy precipitation in the winter, and wide temperature ranges. Strong flows of marine air in the winter from the Pacific Ocean result in heavy precipitation. Precipitation in the summer is generally limited to a few scattered thunderstorms during July. According to the Western Regional Climate Center Placerville station, located centrally in the District, the historical annual average precipitation is approximately 38 inches, with an average monthly precipitation during winter months of about six inches. Temperatures within the Contract water service area range from hot in the summer to cold in the winter, with average monthly temperatures of 87°F in August to 46°F in January. The highest temperatures recorded range from 107°F to 114°F.

Evapotranspiration (ETo) records indicate average values ranging from 1.55 inches in December, to 8.04 inches in July. Low humidity usually occurs in the summer months, from May through October. The combination of hot and dry weather results in high water demands during the summer months. Annual total precipitation is about 25 inches.

A newly installed California Irrigation Management Information System (CIMIS) weather station was sited in Diamond Springs (No. 228) at an elevation of 2,050 feet and has been in operation since September 2011. Because this weather station is new, but is in closer proximity to the Contract water service area, data from this station is being provided. Data for the year 2011 is provided below, but in future updates to the Plan, average annual data will be provided.

2011 Month	Total Precipitation (in.)	Average Air Temperature (ºF)	Average Maximum Temperature (ºF)	Average Minimum Temperature (ºF)	Total ETo (in.)
January	2.26	46.1	55.6	38.2	1.55
February	4.04	44.4	54.0	36.0	2.10
March	11.58	47.1	55.1	39.9	2.39
April	0.69	51.9	61.8	42.4	4.33
May	2.66	55.0	65.8	44.7	5.27
June	2.14	65.7	76.6	55.1	5.88
July	0.86	73.3	85.6	61.4	8.04
August	0.00	75.3	87.6	64.1	7.80
September	0.00	74.4	87.1	62.4	6.05
October	2.14	61.1	72.6	52.5	3.37
November	0.89	49.3	60.1	41.3	1.96
December	0.09	45.9	56.9	37.6	1.86
Annual Totals/Average	**27.35**	**57.5**	**68.2**	**48.0**	**50.60**

Source: CIMIS data for station No. 228, Diamond Springs, CA

2. Impact of microclimates on water management within the district

Because the Contract water service area ranges from the 500 to 1,600 foot elevation, water demands vary but the variance does not cause any water delivery issues.

E. Natural and Cultural Resources

1. Natural resources area within the District

Name	Estimated Acres	Description
Gabbro Soil Preserve	650	Gabbro Plant Preserve – EID has provided funds for land purchase

2. Management of these resources in the past or present by the District

This District does not provide water to or manage the natural resources within the service area.

3. Recreational and/or cultural resources areas

The following table lists the recreational sites within the District service area that are managed by the District.

Name	Estimated Acres	Description
Sly Park Recreation Area	1,100	Fishing, boating, camping, day-use
Forebay Reservoir	35	Fishing, day-use

Note: Areas reported are District-wide

The District also manages recreation sites at Silver Lake in Amador County and Caples Lake in Alpine County that are not within the District service area. There are no cultural resource areas in the Contract water service area.

F. Operating Rules and Regulations

1. Operating rules and regulations

Board Policy 5000 and associated Administrative Regulations pertaining to water supply are provided in Appendix C. A copy of all District Board Policies and Administrative Regulations can be found at www.eid.org.

2. Agricultural water allocation policy

N/A

3. Official and actual lead times necessary for water orders and shut-off

N/A

4. Policies regarding surface and subsurface drainage from farms

N/A

5. Policies on water transfers by the contractor and its customers

To date the District has not transferred water and thus does not have a policy in place.

G. Water Measurement, Pricing, and Billing

1. Agricultural Customers

N/A

2. Urban Customers

Source: 2010 Consumption Report

District-wide

a. Total number of connections – 38,887

b. Total number of metered connections – 38,887

c. Number of connections not billed by quantity - 0

d. Percentage of water that was measured at delivery point – 100%

e. Percentage of water that was billed by quantity – 100%

Contract water service area (information provided for Zones 1, 2, and 4)

a. Total number of connections – 20,685

b. Total number of metered connections – 20,685

c. Number of connections not billed by quantity - 0

d. Percentage of water that was measured at delivery point – 100%

e. Percentage of water that was billed by quantity – 100%

f. Measurement device table

Meter Size/Style	Number Of Meters	Meter Accuracy	Reading Frequency	Calibration and Maintenance Frequency
5/8 " Displacement	1,064	98.5 to101.5%	Bi-Monthly	Replace at failure or when upgraded to radio read
¾ " Displacement	18,789	98.5-101.5%	Bi-Monthly	Repair/replace at failure or upgrade to radio read
1 " Displacement	360	98.5-101.5%	Bi-Monthly	Repair/replace at failure or upgrade to radio read
1½ " Displacement	141	98.5-101.5%	Bi-Monthly	Repair/replace at failure or upgrade to radio read
1½ " Turbine	39	98.5-101.5%	Bi-Monthly	Test every 5-10 years
2 " Displacement	128	98.5-101.5%	Bi-Monthly	Repair/replace at failure or upgrade to radio read
2 " Turbine	83	98.5-101.5%	Bi-Monthly	Test every 5-10 years
2 " Compound	43	98.5-101.5%	Bi-Monthly	Test every 5-10 years
3 " Turbine	4	98.5-101.5%	Bi-Monthly	Test every 5-10 years
3 " Compound	13	98.5-101.5%	Bi-Monthly	Test every 5-10 years
4 " Turbine	4	98.5-101.5%	Bi-Monthly	Test every 5-10 years
4 " Compound	4	98.5-101.5%	Bi-Monthly	Test every 5-10 years
6 " Turbine	1	98.5-101.5%	Bi-Monthly	Test every 5-10 years
6 " Compound	1	98.5-101.5%	Bi-Monthly	Test every 5-10 years
6 " Propeller	1	98-102%	Bi-Monthly	Test every 5-10 years
8 " Turbine	1	98.5-101.5%	Bi-Monthly	Test every 5-10 years
TOTAL	**20,685**			

Note: Meter accuracy per AWWA Standards
Note: Data for Zones 1, 2, and 4

3. Agriculture and Urban Customers

a. Current year agriculture and/or urban water charges

Current year water charges are provided in Appendix D.
M&I Rates: Basic charge with increasing tiered rate on quantity

b. Annual charges collected from single-family residential customers

The following tables provide the average annual water charges for a single-family residential and landscape account. Information is provided for the Contract water service area only of Zones 1, 2, and 4.

Because this report was revised in 2012, and the billing system is limited to generation of bills for the previous 8-month period, samples bills for 2010 reflecting the tried pricing in effect at that time are not available for inclusion the report.

Single-Family Residential Account Base Charge			
Charges ($/customer)	**Charge units (customers)**	**Units billed during year (6 bi-monthly)**	**$ collected**
$20.23	20,798	124,788	$2,524,720

Single-Family Residential Account Volumetric Charges			
Charges (per Tier)	**Charge units ($/CF)**	**Units billed during year (CF)**	**$ collected**
Tier 1	$0.01138	135,485,325	$1,541,823
Tier 2	$0.01374	127,159,534	$1,747,172
Tier 3	$0.01610	129,107,950	$2,078,638

Source: Customer Services Report of Single Family Residential rate accounts

Landscape Account Base Charge			
Charges ($/customer)	**Charge units (customers)**	**Units billed during year (6 bi-monthly)**	**$ collected ($ times units)**
$43.18	58	348	$15,026

Landscape Account Volumetric Charges			
Charges (per Tier)	**Charge units ($/CF)**	**Units billed during year (CF)**	**$ collected ($ times units)**
Tier 1	$0.00622	10,232,797	$63,468
Tier 2	$0.00641	12,661,934	$81,163
Tier 3	$0.00798	6,470,551	$51,635

Source: Customer Services report of Recreational Turf rate accounts

c. Water-use data accounting procedures

Water meter use data is recorded on automated meter reading systems or electronic recorders that download information directly into the District computer database. Customer bills are then generated and include usage and charges for the last bi-monthly period. Customers can request a printout that shows water usage for the past two years. The District keeps historic water use records that are stored electronically.

H. Water Shortage Allocation Policies

1. Current year water shortage policies

The actions required to respond to both near-term and long-term changing water supply conditions are outlined in the District's *Drought Preparedness Plan*, adopted by the Board of Directors on February 11, 2008, and *Drought Action Plan,* developed by District staff in March 2009. Drought stages are defined by associating water supply conditions and demand reduction goals. Drought stage definitions are summarized below including the percent of water supply reduction anticipated for each stage and the corresponding percent of targeted demand reduction.

- Water supply normal and unrestricted - Drought Stage 0
  Stage Zero is in effect at all times unless another subsequent stage is declared and reflects periods when normal water supplies and normal distribution capacity are available. A prohibition of water waste will be in effect during both normal and restricted water supply conditions.
- Water supply slightly restricted - Drought Stage 1
  The objective of Stage 1 is to initiate public awareness of predicted water shortage conditions, and encourage voluntary water conservation to decrease normal demand up to 15%.
- Water supply moderately restricted - Drought Stage 2
  The objective of Stage 2 is to increase public understanding of worsening water supply conditions, encourage voluntary water conservation measures, and then if necessary enforce mandatory conservation measures in order to decrease normal demand up to 30%.
- Water supply severely restricted - Drought Stage 3
  The objective of Stage 3 is to enforce extensive mandatory restrictions on water use, and implement water rationing to decrease normal demand up to 50% to ensure that water use is limited to health and safety purposes.
- Declared water shortage emergencies
  The General Manager may also declare a water shortage emergency due to an existing condition or when there is a high probability that a condition will be realized in the near future. Such conditions may include an unexpected disruption of supply, storage, or distribution system facilities.

Drought indicators and associated trigger levels function to declare a drought early enough to maximize saved water, but not so early that a false drought declaration is issued. Indicators and associated drought stage triggers coordinate with drought stage demand reductions to avoid water supply shortfalls.

The District uses the Supply Remaining Index (SRI) to determine drought stages. A key component of the SRI drought trigger plan is a measure of the number of days

supply remaining (DSR). The DSR is a tool that predicts when the utility needs to reduce water demand. When the DSR is low, there is a limited amount of water supply left and drought restrictions should be imposed to stretch the supplies longer. The DSR indicator incorporates expected future supply and demand, and calculates the DSR for each month. The DSR indicator is a function of:

- Current storage in Jenkinson Lake, Echo Lake, Lake Aloha, Silver Lake, and Caples Lake,
- Worst case expected supplies – conservatively based on the minimum monthly hydrology in the historical record, and
- Normal projected demand by month.

District staff also takes action to determine annual water availability and commitments. Administrative Regulation 1041 is provided in Appendix E and describes those actions.

2. Current year policies that address wasteful use of water

The District prohibits uses of District-supplied raw, potable, and recycled water that constitute water waste under Administrative Regulation. The objective is to encourage reasonable use of water supplies by prohibiting all intentional or unintentional water waste, including the use of wasteful equipment or techniques, when a reasonable solution or alternative is available.

I. Evaluate Policies of Regulatory Agencies Affecting the Contractor and Identify Policies that Inhibit Good Water Management

Uncertainty concerning the implementation of the USBR Water Shortage Policy for Central Valley Project Municipal & Industrial contractors is a significant inhibition to the District's water management. This is because the District primarily serves the western portion of its service area from Folsom Reservoir, where its CVP Water Service Contract is the primary source of supply, and the District has limited capacity to serve this portion of its service area with alternative supplies. The District is actively participating in USBR efforts to revise and finalize its Water Shortage Policy. We encourage the USBR to complete this work as soon as possible and support the position of the American River M&I Contractors as expressed in this process.

The State Water Resources Control Board policies regarding water use reporting also inhibit good water management at the District. In particular, the SWRCB constrains the District water management by requiring water use to be first attributed to the most senior right available when multiple water rights attach to the same point of diversion rather than allowing the District to account for its exercise of water rights in the manner most suitable for good management of the District's water portfolio. The SWRCB also requires reporting of monthly amounts diverted into and released from storage for storage-based rights. This requirement is impractical and impossible to satisfy at on-stream storage facilities, particularly given that multiple rights attach to the same facility. Finally the SWRCB requires that use under overlapping water rights that work in conjunction with one another be disaggregated for reporting purposes. This, too, is impractical and contrary to the intention of acquiring and maintaining of the overlapping rights. It inhibits good water management and has the potential to jeopardize the continued full exercise of the District water rights.

Section 2: Inventory of Water Resources

A. Surface Water Supply

1. Acre foot amounts of surface water delivered to the District by each source

See Table 1 and 8 in Section 5.

B. Groundwater Supply

1. Acre foot amounts of groundwater pumped and delivered by the District

The District currently does not use groundwater as a supply source. Groundwater in the service area occurs in fractured hard rock and is unreliable as a source.

2. Groundwater basin that underlies the district

None

3. Contractor operated wells and managed groundwater recharge areas

The District does not operate or manage any wells or groundwater recharge areas.

4. If there is conjunctive use of surface and groundwater, describe it

The District does not participate in a conjunctive use of surface and groundwater.

5. For managed groundwater basins, attach a copy of the management plan

The District does not use water from a managed or adjudicated groundwater basin.

6. For participation in groundwater banking, attach a description of the banking plan

The District does not participate in groundwater banking.

C. Other Water Supplies

The District distributes recycled water for golf course, street median, school, playground, soccer field, park, commercial, and residential landscape irrigation and construction (dust control, soil compaction and general construction use). The District recycled water system consists of supply from the El Dorado Hills and Deer Creek wastewater treatment plants (EDHWWTP and DCWWTP), an interconnected network of transmission and distribution pipelines, pump stations, storage tanks, pressure reducing stations, and appurtenant facilities located within the communities of El Dorado Hills and Cameron Park that are within the Contract water service area.

D. Source Water Quality Monitoring Practices

1. Potable water quality

There are no current or historic surface water quality concerns or problems. The 2010 Annual Customer Water Quality Report describes surface water quality testing results and is attached in Appendix F.

2. Agricultural water quality concerns

N/A

3. Description of the water quality testing program and the role of each participant in the program

The District complies with all current Safe Drinking Water Act monitoring requirements. In addition, the District conducts seasonal monitoring of Jenkinson Lake as required by §115842 of the California Health and Safety Code.

4. Current water quality monitoring programs

The District maintains an approved water quality monitoring program on file with the California Department of Public Health.

E. Water Uses within the Contract Water Service Area

1. Agricultural

N/A

2. Types of irrigation systems used for each crop

N/A

3. Urban- 2010

The data provided in the table below is for Zone 1, 2, and 4 which are all within the Contract water service area. The total use in ac-ft exceeds the amount of Contract water delivered because other sources of water are also supplied to the area and further breakdown by water source is not available.

Customer Type	Number of Connections	Use in AF
Single Family	19,696	9,113
Multifamily	260	635
Commercial	670	1,454
Industrial	0	0
Institutional	0	0
Landscape Irrigation	59	676
Recycled	3,785	2,063
Other Uses	n/a	256
Real & Apparent Losses	n/a	1,544
Total	**24,470**	**15,741**

Notes: Real & Apparent Losses are estimated at 13% of the potable use not including Other Uses or Recycled Water
The commercial category includes commercial, industrial, institutional, and school accounts.
Source: EID 2010 Consumption Report for Zones 1, 2, and 4

4 Urban Wastewater Collection/Treatment Systems serving the service area

The District has five wastewater service areas. The three largest service areas of El Dorado Hills, Deer Creek, and Motherlode are served by a series of lift stations, forcemains, and gravity mains that convey sewage to either the El Dorado Hills Wastewater Treatment Plant (EDHWWTP) or Deer Creek Wastewater Treatment Plant (DCWWTP). Sewage from both the Deer Creek and Motherlode Service Areas flow to the DCWWTP, whereas sewage from the El Dorado Hills Service Area flows to the EDHWWTP. Together, these two wastewater treatment plants serve a population of nearly 60,000 people. Sewage collected within the Contract water service area is collected and treated at either the DC or EDH WWTP.

Treatment Plant	Treatment Level	AF	Disposal to/uses
El Dorado Hills	3	2,860	Carson Creek/recycled water
Deer Creek	3	3,620	Deer Creek/recycled water
	Total	**6,480**	
Total discharged to ocean and/or saline sink			

Source: Wastewater Treatment Plant Operations Reports

5. Groundwater management plan/banking program

The District does not operate any groundwater recharge, management, or banking systems.

6. Transfers, exchanges, rescheduling, purchases, or sales into or out of the district

The District does not transfer or exchange water into or out of the service area.

7. Other uses of water

Within the Contract water service area, there are no other uses of water other than for consumptive purposes. District-wide, the District makes non-consumptive use of water to generate hydroelectricity at the Project 184 El Dorado Powerhouse, and to provide instream flows for wildlife and habitat enhancement as required by water rights conditions, agreements, and regulatory permits. Water stored in and released from Caples Lake, Lake Aloha, Echo Lake, and Silver Lake is used to meet instream flow requirements below those reservoirs' dams, generate hydroelectric power, and meet bypass flows in the South Fork American River. Water releases from Clear Creek, Jenkinson Lake, and Weber Reservoir provide wildlife and habitat enhancement.

F. Outflows from the District (Ag only)

N/A

G. Water Accounting

1. Quantify contractors' water supplies

See Table 1 of Section 5 for Surface Water Supply.

See Table 2 of Section 5 for Groundwater Supply.

See Table 3 of Section 5 for Total Water Supply.

2. Quantify water used

See Table 4 of Section 5 for Distribution System Losses.

3. Overall water inventory

See Table 6 of Section 5 for District Water Inventory.

Section 3: BMPs for Agricultural Contractors

N/A

Section 4: BMPs for Urban Contractors

A. Urban BMPs

BMP and water efficiency implementation 3-year budget

BMP	2010 Actual	2011 Projected	2012 Projected
BMP 1 – Foundational Conservation Coordinator Water Waste Prohibition Wholesale Agency Assistance Water Loss Control	$90,000	$108,000	$112,184
BMP 2 – Education Public Outreach School Education	23,758	16,440	16,833
BMP 3 – Residential Indoor Water Surveys Outdoor Water Surveys Plumbing Retrofits High-Efficiency Clothes Washers WaterSense Specification Toilets	159,097	176,630	232,207
BMP 4 – Commercial, Industrial, Institutional (CII) Water Conservation Measures and Incentives	69,097	68,630	12,023
BMP 5 – CII Landscape ETo Water Budgets Technical Assistance Landscape Water Surveys Irrigation Equipment Incentives	34,675	36,459	86,459
Total	$376,627	$406,159	$459,706

Note: This budget information will vary from that reported in the CUWCC BMP Retail Coverage Report in Appendix G as this budget is for 2010 only and the CUWCC budget is for the period of 2009 – 2010.

The following table provides a listing of all proposed actions with the schedule/monitoring. A copy of the database submitted to the CUWCC is provided in Appendix G. Examples of water conservation flyers and educational programs are provided in Appendix H.

Conservation Coordinator	Ongoing position	EID has funded and employed a full-time water conservation coordinator for many years.
Water Waste Prohibition	Ongoing - prohibition is year-round; enforcement is conducted during normal business hours	EID's Administrative Regulation 1041 - Water Waste Prohibition, was adopted on February 26, 2008 and is in effect at all times to prohibit water waste.
Wholesale Agency Assistance	Ongoing assistance	EID provides water efficiency assistance to City of Placerville customers through a 1999 wholesale agreement between the agencies.
Water Loss Control	Ongoing implementation	EID completed a comprehensive and system-wide water audit through participation in an AWWA Research Foundation study that was completed in 2005. Several recommendations for water loss control were contained in the final report, and EID continues to implement these improvements as staff time and funding permits.
Metering with Commodity	Ongoing metering and bi-monthly bill	EID is 100% metered, and provides its customers with bi-monthly water bills, based on actual meter reads, in order to assist the customer in managing their water usage.

BMP	Schedule/Monitoring	Description of Proposed Action
Conservation Pricing	Ongoing implementation	EID has adopted tiered water rates for many years in order to encourage its customers to conserve water, and the current rate structure is compliant with this BMP.
Public Information Programs	Ongoing - with plan adoption each fiscal year; water efficiency information available 24/7 at www.eid.org	Implementation of this BMP is met through EID's membership in the Sacramento Regional Water Authority's Water Efficiency Program. Refer to Appendix J for the RWA Water Efficiency Program Fiscal Year 2012 Category 1 Business Plan for more detailed information. EID also offers water efficiency and leak detection information on its website.
School Education Programs	Ongoing - with plan adoption each fiscal year; literature and teaching aides available during normal business hours	Implementation of this BMP is met through EID's membership in the Sacramento Regional Water Authority's Water Efficiency Program. Refer to the attached *Fiscal Year 2012 Category 1 Business Plan* adopted by RWA members for more detailed information. EID also offers water efficiency literature and teaching aides to educators and youth leaders through a school education page on its website.
Assistance Program	Ongoing - assistance provided during normal business hours	EID provides onsite leak detection assistance for the customer, along with the distribution of complimentary plumbing retrofits, as needed.

BMP	Schedule/Monitoring	Description of Proposed Action
Landscape Water Survey Program	Ongoing - with surveys provided during normal business hours; grant funding expires 12/31/2012	EID provides onsite landscape water surveys, including inspection of the customer's irrigation system for leaks and recommendations for water efficiency improvements. Survey also includes pre-qualification for a CALFED "Smart Irrigation Rebate" grant program for eligible customers.
High-Energy Clothes Washers	Ongoing - with information available 24/7 on public website; rebates may resume in 2013	Information and a link to the CEE website are available on EID's water efficiency webpage for residential customers. During 2010, the residential rebate activity was three times the number required to meet EID's BMP target for the year. Therefore, rebates will not be considered again until calendar year 2013.
WaterSense Specification Toilets	Ongoing - with information available 24/7 at www.eid.org; direct install project in 2012; and possible rebates in 2013	Information and a link to the EPA WaterSense website are available on the EID water efficiency webpage for residential customers. Residential rebates will not be considered again until calendar year 2013 due to budget constraints. A direct install with interior water survey is planned for 2012 for disadvantaged customers through a Prop. 84 regional water efficiency project.
WaterSense Specifications for Residential Development	NA	Toilet specifications for new residential developments are not under the jurisdiction of EID; but rather are under the authority of the El Dorado County Planning Department and the County Board of Supervisors.

BMP	Schedule/Monitoring	Description of Proposed Action
High Bill Contact with Single- and Multi-Family Customers	Ongoing - during normal business hours	Utility billing staff have daily contact with single- and multi-family customers regarding their high water bills, offering ways to reduce water usage, leak detection assistance if warranted or a complimentary water survey. (See below - Notifying Customer of Leaks for additional activity).
Educate Residential Customers about the Behavioral Aspects of Water Conservation	Ongoing - during normal lobby business hours; several times per year at events; and bi-monthly in newsletters	Multiple publications are offered to EID customers in the headquarters lobby and at booths during local events. In addition to publications, tools that address behavioral changes include indoor/outdoor self-checklists, and slide rulers/wheels showing ways to save water. A four page bi-monthly newsletter that contains water efficiency tips and information is mailed to all customers with their water bill.
Notify Residential Customers of Leaks on the Customer's Side of the Meter	Ongoing - all customer meters read bi-monthly; auditing during normal business hours	During bi-monthly readings, EID meter technicians check the meter reading for abnormal usage or a continuously turning leak detection needle. If either are noted, they contact the customer with a knock on the door and/or a door tag, notifying them that there is a possible water leak on their side of the water meter. Utility billing staff also audits meter reads for abnormally high water usage after each billing cycle, ordering a meter re-read and a meter leak detection check if warranted. The customer is notified by mail if there is a possible water leak.

BMP	Schedule/Monitoring	Description of Proposed Action
Provide Bill or Surcharge Refunds for Customers to Repair Leaks on Customer's Side of the Meter	Ongoing - but limited to one adjustment every five years per account	EID's Administrative Regulation 9051.3 allows for an adjustment to an account if excessive delivery is the result of water leakage that occurs from underground or unexposed pipes beyond the discharge flange of the water meter. EID must receive the request for credit in writing within 60 days from the bill date of the bill that reflects the leakage. An adjustment is made only after the leak has been repaired and it is reasonable to predict that the leak or loss will not occur again. The customer must submit repair receipts for verification that the leak has been repaired.
Provide Unique Water Savings Fixtures that are not in the BMP list above	Annual - displayed during winter months (landscape focus during irrigation season)	EID has provided a demonstration model in the headquarters lobby of a hot water re-circulating device to educate our customers of this unique water savings fixture for their homes.
Install Residential Water Use Monitors	Ongoing - monitoring through bi-monthly billing; leak detection information available 24/7 at www.eid.org	Customers are encouraged to monitor their water usage through their metered, bi-monthly water bills; and also by checking their meter using the leak detection needle. Leak detection instructions are available on the EID website and through customer contact during normal business hours.
Participate in Programs that Provide Residences w/School Water Conservation Kits	N/A	N/A

BMP	Schedule/Monitoring	Description of Proposed Action
Implement an Automatic Meter Reading Program for Residential Customers	Ongoing - for new meter installations; dependent upon future funding availability for retrofits.	Approximately 47% of EID's existing meters have AMR capability. An AMR retrofit program was funded for a number of years; however, due to budget constraints, there is currently no retrofit program. All new meters are installed with AMR capability.
Other Residential Programs not Listed	Grant funding available until 12/31/2012 for both upgrades	EID offers financial incentives to residential customers for the upgrade of landscape irrigation systems, and the conversion of automatic controllers to weather-based irrigation controllers.
Industrial Process Water use Reduction	N/A	N/A
Commercial Laundry Retrofits	N/A	N/A
Industrial Laundry Retrofits	N/A	N/A
Filter Upgrades	N/A	N/A
Car Wash Reclamation Systems	N/A	N/A
Wet Cleaning	N/A	N/A

BMP	Schedule/Monitoring	Description of Proposed Action
Water Audits - Interior and Exterior	Ongoing - for retrofits; but grant funding for toilets, urinals, and landscape upgrades expires after 12/31/2012	EID offers interior and exterior water audits to all CII customers, but is currently focusing efforts on comprehensive audits for institutional customers such as schools and community service districts. Upon completion of the interior audits, complimentary plumbing retrofit supplies are provided, along with financial incentives to replace high-flush volume toilets and urinals. Upon completion of the exterior audits, EID offers financial incentives for the upgrade of irrigation systems, and the conversion of automatic controllers to weather-based irrigation controllers.
Clean in Place Technology	N/A	N/A
Waterless Wok	N/A	N/A
Alternative On-site Water Sources	N/A	N/A
Cooling Condensation	N/A	N/A
Foundation Drain Water	N/A	N/A
Gray Water	N/A	Gray water systems are not under the jurisdiction of EID; but rather, are under the authority of the El Dorado County Planning Department and the County Board of Supervisors.

BMP	Schedule/Monitoring	Description of Proposed Action
Storm Water	N/A	Storm water systems are not under the jurisdiction of EID; but rather, are under the authority of the El Dorado County Planning Department and the County Board of Supervisors.
Rain Water	N/A	Rain water systems are not under the jurisdiction of EID; but rather, are under the authority of the El Dorado County Planning Department and the County Board of Supervisors.
Pool and Water Feature Recycling	Ongoing - prohibition is year-round; enforcement is conducted during normal business hours	EID's Administrative Regulation 1041, Water Waste Prohibition, requires recirculation devices in ponds, waterways, decorative basins or swimming pools. Discharging of backwash water is also limited to a reasonable frequency necessary to maintain the clarity and cleanliness of the water.
Sub-metering	Ongoing - for customer funded submeter installations; grant funded project expires 12/31/2012	EID offers CII customers with a mixed use meter the opportunity to install a landscape submeter in order to better manage their irrigation demands. For eligible sites that have a minimum of 5,000 square feet of irrigated area, there are also financial incentives available for the submeter assembly and the conversion of a standard irrigation controller to a weather-based irrigation controller.
Pool Covers	N/A	N/A

BMP	Schedule/Monitoring	Description of Proposed Action
High Efficiency Showerheads	Ongoing - offered during water surveys; available in lobby during normal business hours	EID offers CII customers complimentary low-flow showerheads to replace older high-flow models.
Faucet Flow Restrictions	Ongoing - offered during water surveys; available in lobby during normal business hours	EID offers CII customers complimentary low-flow faucet aerators to replace older high-flow aerators.
Water Efficient Dishwashers	N/A	N/A
Hot Water on Demand	N/A	N/A
Pre-rinse Spray Values of 1.2 gpm or less	Ongoing - offered during water surveys; available in lobby during normal business hours	EID offers CII customers complimentary low-flow pre-rinse spray nozzles to replace older high-flow models.
Central Flush System	N/A	N/A
Other Measures Chosen by Agency	Grant funding available until 12/31/2012 for both upgrades	EID offers financial incentives to CII customers for the upgrade of landscape irrigation systems, and the conversion of automatic controllers to weather-based irrigation controllers.
Monitor and Report on Landscape Water Use	Grant funding available beginning in 2012; continues through 2014	Through a regional Proposition 84 Water Efficiency Project, landscape water budgets will be developed for EID's large landscape customers that will include monitoring and reporting to the customer.

BMP		
Provide Technical Landscape Resources & Training	Provided two times per year	Through EID's membership in the Sacramento Regional Water Authority's Water Efficiency Program, a 10-week "Green Gardener" class is sponsored twice per year for local landscape professionals.
Provide Incentives	Grant funding available until 12/31/2012 for both upgrades	EID offers financial incentives to dedicated landscape customers for the upgrade of landscape irrigation systems, and the conversion of automatic controllers to weather-based irrigation controllers.
Participate in Local and Regional Planning and Regulatory Activities	Ongoing participation	EID is a member of: the Sacramento Regional Water Authority (RWA); RWA's Water Efficiency Program Advisory Committee (RWEPAC); the American River Basin IRWMP; the Cosumnes, American, Bear, and Yuba (CABY) Rivers IRWMP; the California Urban Water Conservation Council (CUWCC); the Association of California Water Agencies (ACWA); and the Mountain Counties Water Resources Association (MCWRA).
Develop a Holistic Approach to Landscape Water Use Efficiency	Ongoing development	EID is working towards a more holistic approach to landscape water efficiency through the above programs.

Section 5: Contractor Water Inventory Tables

Table 1

Surface Water Supply

2010 Month	CVP Contract (acre-feet)	Warren Act Contract (acre-feet)	State Water (acre-feet)	Local Water (acre-feet)	Total (acre-feet)
	0		0		
	0		0		
	0		0		
	0		0		
	0		0		
	911		0		
	1,288		0		
	1,271		0		
	808		0		
	731		0		
	304		0		
	241		0		

Source: 2010 Diversion Report and USBR Billing

Table 2

Ground Water Supply

2010 Month	District groundwater (acre-feet)	Private groundwater (acre-feet)

Table 3

Total Water Supply

2010 Month	Surface Water Supply (acre-feet)	District Groundwater (acre-feet)	Recycled M&I Wastewater (acre-feet)	Total District Water Supply (acre-feet)
			30	
			29	
			60	
			85	
			183	
			368	
			384	
			322	
			338	
			239	
			52	
			26	

Note: Recycled wastewater is treated urban wastewater that is reused

Table 4

Distribution System

2010 Area or Line	Length (feet)	Leaks (acre-feet)	Breaks (acre-feet)	Flushing/Fire (acre-feet)	Total (acre-feet)
Contract water service area	1,772,496	1,544	0	256	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	
	0	0	0	0	

Source: 2010 Consumption Report for flushing/fire
Leaks are estimated at 13% of the total water supplied

Table 6

2010 District Water Inventory

	0
	0
	0
	0
2010	
	16,601

NOTE: Table does not calculate accurate inside use as water is provided through additional sources in addition to the Contract water.

Table 8

Annual Water Quantities Delivered Under Each Right or Contract

Year	CVP Contract (acre-feet)	Warren Act Contract (acre-feet)	State Water (acre-feet)	Local Water (acre-feet)	Other Water (acre-feet)	Total (acre-feet)
	7,136	0	0	0		
	7,728	0	0	0		
	5,696	1,832	0	0		
	5,960	2,464	0	0		
	5,115	2,440	0	0		
	5,116	2,673	0	0		
	6,599	2,572	0	0		
	3,747	3,135	0	0		
	4,569	2,124	0	0		

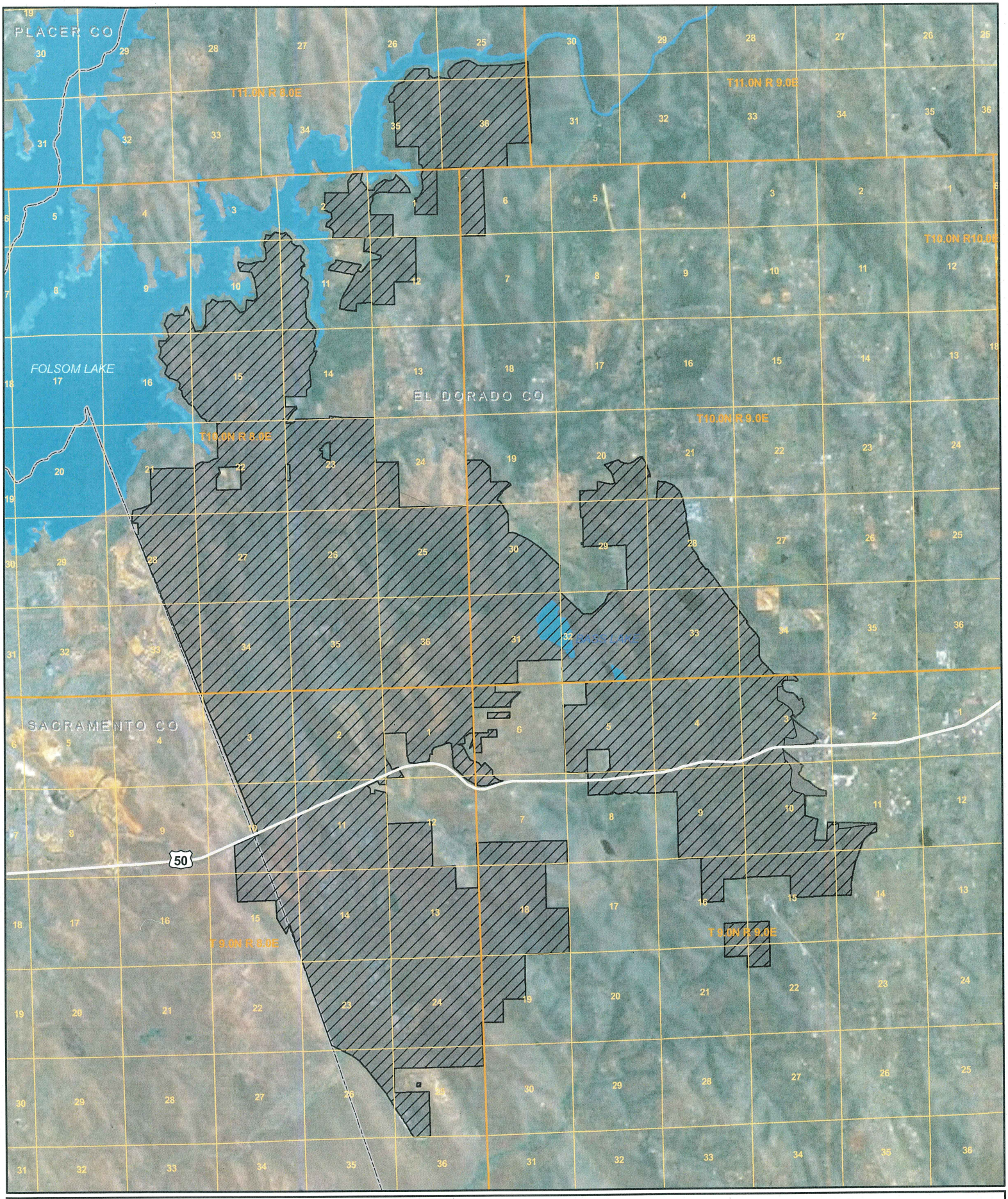
Source: Annual Diversion Reports and USBR Billings

Appendices

Appendix A – Location Map and Contract Water Service Area Map

El Dorado Irrigation District

El Dorado County



El Dorado Irrigation District

Contract No. 14-06-200-1357A-LTR1

Exhibit A

District Boundary

Contractor's CVP Service Area

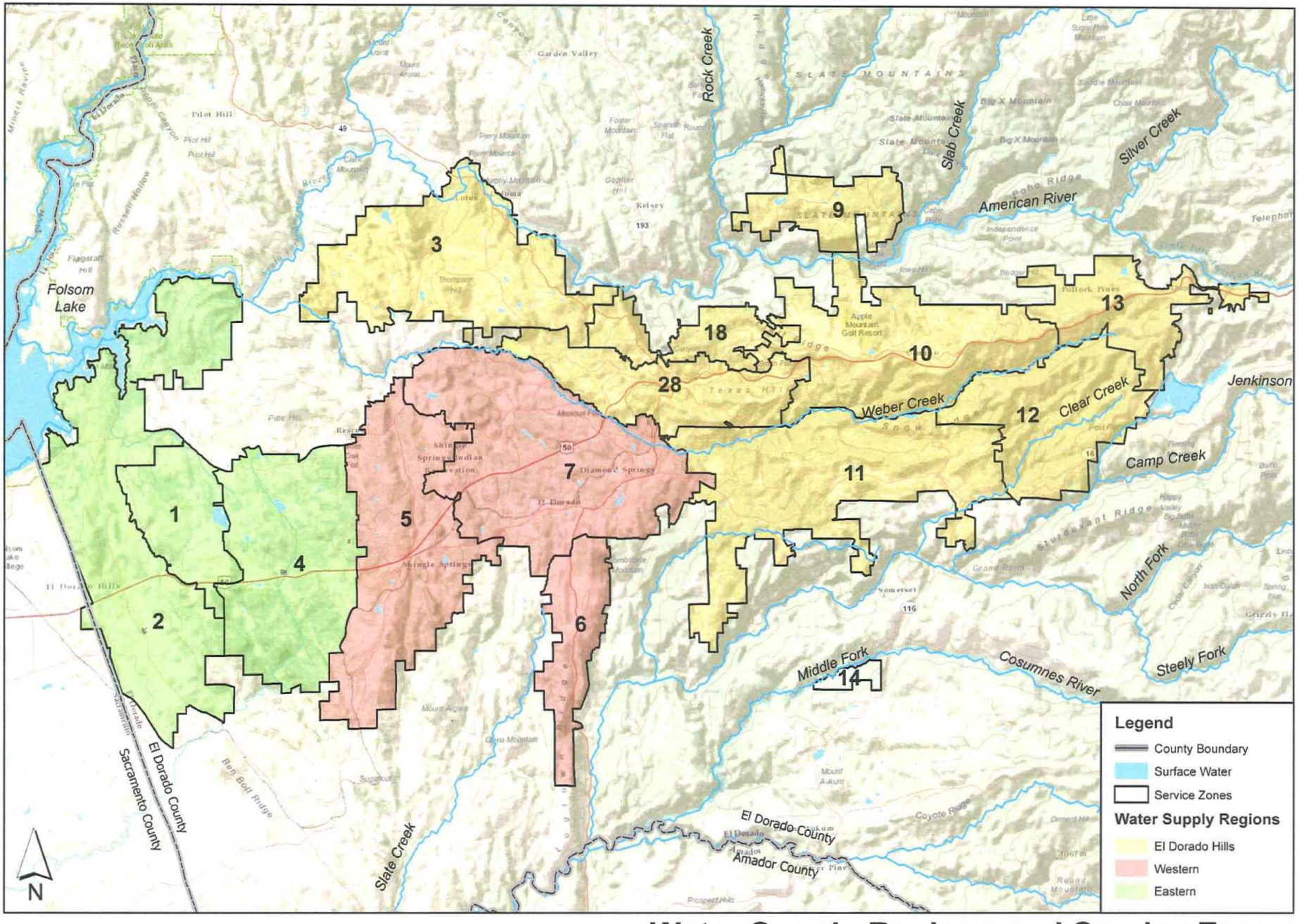
Miles

0 0.5 1 2 3

Date: October 27, 2004, Revised 6/13/05, 2/17/06, 4/18/07, 10/29/07, 03/18/10
File Name: N:\districts\contracts\el_dorado_id\el_dorado_id.mxd

353-202-1

Appendix B – District-wide Service Area Map



Water Supply Regions and Service Zones

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Appendix C – Board Policy 5000

BP 5000 WATER SUPPLY

BP 5010 Water Supply Management

The Board is committed to provide a water supply based on the principles of reliability, high quality, and affordability in a cost-effective manner with accountability to the public. It is the General Manager's responsibility to ensure that the tenets of this policy are carried out in an open, transparent manner through sound planning, to assure preparedness under varying conditions, and effective management.

It is the policy of the Board that the District will not issue any new water meters if the *Water Resources and Service Reliability Report* indicates that there is insufficient water supply. When warranted by the findings of the report, the General Manager will bring the possibility of restrictions on meter issuance to the Board's attention. Any such restrictions will be established pursuant to Water Code Section 350 et. Seq. of the California Water Code.

AR 5010 Water Availability and Commitments

AR 5010.1 Annual reporting

The District will maintain adequate water supply and demand records to ensure accurate monitoring and reporting. The General Manager will ensure that an updated *Water Resources and Service Reliability Report* is prepared annually for review by the Board of Directors. The report will include the current system firm yield of the overall District, along with the water supply and infrastructure capacity, potential demands, existing commitments, and meter availability for each water service area of the District as defined in the report.

AR 5010.2 Shortages

The *Water Resources and Service Reliability Report* will use a system firm yield method to determine that sufficient water supply exists to meet potential demands. Under this methodology, approximately 95% of the time sufficient water supply is available to meet normal water demands, but during the remaining 5% of the time water shortages may occur. Such shortages may result in the implementation of voluntary or mandatory conservation measures.

AR 5010.3 New meter restrictions

Should findings in the *Water Resources and Service Reliability Report* warrant restrictions on the issuance of new water meters, the General Manager will bring the situation to the attention of the Board of Directors. During emergency conditions

when supplies are restricted or limited, the General Manager may also bring to the Board's attention possible restrictions on water meter availability.

AR 5011 Water Supply Management Conditions

The District recognizes that variations in weather patterns can cause watersheds to yield different quantities of water supply in any given year. In some years, dry weather or drought conditions may occur which result in varying degrees of water shortage. The District also recognizes that future climate change may impact the intensity and duration of future droughts.

The actions required to respond to both near- and long-term changing water supply conditions are outlined in the District's *Drought Preparedness Plan*, adopted by the Board of Directors on February 11, 2008. The following water supply management conditions, and corresponding drought stages, describe the incremental steps needed to manage increasing levels of water shortage.

AR 5011.1 Water supply normal and unrestricted

Drought Stage Zero – Ongoing water conservation

Stage Zero is in effect at all times unless another subsequent stage is declared. Stage Zero reflects periods when normal water supplies and normal distribution capacity are available, and the District anticipates the ability to meet the unrestricted demands of its customers. A prohibition of water waste will be in effect during both normal and restricted water supply conditions.

AR 5011.2 Water supply slightly restricted

Drought Stage 1 – Voluntary reductions in use

The objective of Stage 1 is to initiate public awareness of predicted water shortage conditions, and encourage voluntary water conservation to decrease normal demand up to 15%.

AR 5011.3 Water supply moderately restricted

Drought Stage 2 – Voluntary and mandatory reductions

The objective of Stage 2 is to increase public understanding of worsening water supply conditions, encourage voluntary water conservation measures, and then if necessary, enforce mandatory conservation measures in order to decrease normal demand up to 30%.

AR 5011.4 Water supply severely restricted

Drought Stage 3 – Mandatory restrictions

The objective of Stage 3 is to enforce extensive mandatory restrictions on water use, and implement water rationing to decrease normal demand up to 50% to ensure that water use is limited to health and safety purposes.

AR 5011.5 Declared water shortage emergencies

The General Manager may also declare a water shortage emergency due to an existing condition or when there is a high probability that a condition will be realized in the near future. Such conditions may include an unexpected disruption of supply, storage, or distribution system facilities.

AR 5012 District Infrastructure and Facilities

AR 5012.1 Connections to District infrastructure

Connections to the District's infrastructure shall be made only by District employees or under the direct supervision of District employees. No connection to District infrastructure shall be made without prior approval.

AR 5012.2 Responsibility for infrastructure maintenance

The District's ownership of and responsibility for the operation and maintenance of facilities will end at the discharge side of the meter, or discharge conduit. In circumstances where the customer owns a testable check valve assembly, the annual testing and maintenance of internal components are conducted by the District. The District will be responsible to operate, maintain, and replace District water mains, flumes, ditches, and other facilities of the District's total supply, transmission, and distribution system. The District's water supply system shall be under the exclusive control and management of duly appointed District personnel, and no one shall have any right to operate, maintain or replace any of the District's water facilities, or interfere with the District system in any manner.

For service through private waterlines or community group systems, measuring devices placed within these systems shall be at the sole discretion of the District. Any such placement, however, does not create an obligation on the part of the District for the operation, maintenance, or replacement of the private waterlines or group system.

AR 5013 Water Service Interruptions or Restrictions

Water service interruptions or restrictions may occur during water supply conditions, especially Drought Stages 2 and 3, and water shortage emergencies as declared by the General Manager. The District may, with prior notification, temporarily remove or lock off meters or otherwise interrupt water service to classifications not assigned for human consumption.

Irrigation and agricultural services provided by the District may be subject to an interruption or restriction under these conditions. Construction fire hydrant meters or other temporary water meter services provided by the District may also be subject to removal, lock-off, restriction, or discontinuance.

The District may also restrict water availability to construction fire hydrant meters in certain locations due to constraints in the distribution system.

AR 5013.1 Violations

The District reserves the right to interrupt or restrict, without prior notice, any irrigation or agricultural service, construction, or temporary meter that is found to violate the restrictions imposed by a water shortage condition.

AR 5013.2 Service interruptions due to planned or unplanned maintenance

The District reserves the right at any and all times to shut off water delivery or reduce pressure for the purpose of maintenance or making repairs and alterations to the water system. Whenever possible, advance notice of interruption of service will be given to all affected water users.

AR 5014 Fire Suppression

A fire suppression system may consist of a private interior fire sprinkler system or public fire hydrants. The fire protection agency having jurisdiction over the property will set the fire suppression requirements. The District will provide water for fire hydrants and other fire suppression facilities, but does not warrant or guarantee any range of pressures or rates of flow. The District will not be liable for water pressure or damage in any manner that arises from the availability of water or water pressure at any hydrant or facility used for fire suppression.

The District will provide water at no cost to fire protection agencies for the purpose of fire suppression activities. These activities include equipment maintenance, testing, training, fire hydrant flow testing, and the filling of fire suppression equipment. All other uses of water, including domestic and irrigation uses at fire stations, will be supplied in accordance with District regulations and procedures and must be metered and paid for by the fire protection agency.

AR 5014.1 Fire hydrants

Public fire hydrants will be installed and connected to District mains when requested by the fire protection agency having jurisdiction or when required as a condition of a building permit or subdivision of land. The cost of the fire hydrant assembly and all other appurtenances, including installation, will be paid for by the holder of the building permit or the developer of the project. The District will review, approve, and inspect all public fire hydrant installations.

All public fire hydrants will be owned, operated, and maintained by the District from the water main up to and including the hydrant. All fire hydrants will be inspected, tested, and externally maintained by the fire protection agency.

No person, other than authorized EID, fire district, or fire department personnel, shall open or draw water from any fire hydrant connected to the District's distribution system without prior specific authorization from the District. Refer to AR 9026.3 for authorized fire hydrant meter use.

The removal or relocation of any public fire hydrant must be approved by the District in advance, and any removal or relocation will be made at the expense of the person or entity requesting the change.

AR 5014.2 Commercial fire suppression services
The property owner will be responsible for the expense of installing a commercial fire suppression system and appropriate backflow prevention device as required by the District. The District will review, approve, and inspect the private fire service installation up to the post-indicator valve.

Water provided to a fire suppression sprinkler system will not be used for any purpose other than extinguishing a fire or testing of the fire protection system.

AR 5014.3 Residential fire suppression services
A residential fire sprinkler system may be served by the residential water meter except if a separate service line and water meter is needed to provide the required fire flow.

AR 5015 Ground Water Supply
Because of the unreliable nature of underground water sources in most of El Dorado County, ground water will not be relied on to augment firm yield supply or as a sole source of water for domestic, irrigation, or fire-fighting purposes. Any consideration of direct ground water augmentation to the existing water system will be evaluated on the basis of short- and long-term reliability, quality, and economics. More than one professional, expert opinion regarding adequacy will be required. The costs of necessary tests, expert opinions, and District staff time will be borne by the applicant.

BP 5020 Cross-Connection Control and Backflow Prevention
The District will establish and maintain a cross-connection control program according to the California Code of Regulations - Title 17, Section 7583-7605, or their successors.

AR 5021 Cross-Connection Control and Backflow Prevention
In accordance with BP 5020, the District protects its public water system at the service connection against any actual or potential cross-connection between the

public water system and any source or system containing used water, industrial fluid, gas or other substance that is not, or cannot be, approved as safe, wholesome and potable for human consumption. Such protection is enforced through California Code of Regulations Title 17 Section 7584, which requires the District to comply with all applicable state and federal laws required by the Safe Drinking Water Act of 1974, as they are now constituted, or as they may hereafter be amended or recodified, and implemented through the District's "Cross-Connection Control and Prevention of Backflow Program."

A copy of the current "Cross-Connection Control and Prevention of Backflow Program" is available upon request from the Environmental Division.

BP 5030 Water Conservation

It is Board policy to take reasonable and prudent measures to conserve all water and to adopt and implement water-use efficiency programs that will benefit its customers.

BP 5040 Drought Preparedness and Climate Variability

The Board supports the adoption and implementation of a drought preparedness plan to ensure a proactive response to the impacts of drought conditions. Included in the planning effort is consideration of climate variability.

BP 5050 Watershed Management

It is Board policy to adopt and support watershed management strategies that will maximize water supply reliability and water quality.

Appendix D – Water Rates

WATER RATES

Basic Charges	
5/8" and 3/4" meter	**$22.51**
1"	**$26.14**
1 1/2"	**$30.35**
1 1/2"T	**$35.23**
2"	**$40.90**
2"T	**$47.48**
3"	**$55.12**
3"T	**$64.00**
4"	**$74.30**
4"T	**$86.26**
6"	**$100.14**
6"T	**$116.26**
8"T	**$134.97**
10"T	**$156.69**
12"T	**$181.91**
T = Turbine Meter	
Basic Charge Strawberry	**$43.62**

cf = 1 cubic foot = 7.48 gallons
1 miners inch = 11.22 gallons per minute (gpm)
1 miners inch day (mid) = 16,156.80 gallons or 2,160 cubic feet
Services outside of the District are billed at 1.5 times the adopted rate.

Commodity Charges (per cf consumed)	Rate per cf
Single Family Residential	
0 - 1,500 cf	**$0.01138**
1,501 - 4,500 cf	**0.01374**
Above 4,500 cf	**0.01610**
Commercial and retail landscape	
All water consumed	**$0.01243**
Agriculture metered irrigation (with residence)	
0-1800 cf	**$0.01138**
18,01-58,200 cf	**0.00119**
Above 58,200 cf	**0.00136**
Agriculture metered irrigation (without residence)	
0-58,200 cf	**$0.00119**
Above 58,200 cf	**0.00136**
Agricultural metered irrigation (with residence)	
IMS participant	
0 - 1,800 cf	**$0.01138**
1,801 - 30,000 cf	**0.00103**
30,001 - 58,200 cf	**0.00119**
Above 58,200 cf	**0.00136**
Agricultural metered irrigation (without residence)	
IMS participant	
0 - 30,000 cf	**$0.00103**
30,001 - 58,200 cf	**0.00119**
Above 58,200 cf	**0.00136**
Small Farms	
0 - 1,800 cf	**$0.01138**
1,801 - 6,500 cf	**0.00103**
6,501 - 50,000 cf	**0.00119**
Above 50,000 cf	**0.00136**
Recreational Turf (5/8" - 1 1/2"T meter size)	
Recreational Turf (2", 2"T, 3", 3"T meter size)	
0 - 37,500 cf	**$0.00622**
37,501 - 166,700 cf	**0.00641**
Above 166,700 cf	**0.00798**
Recreational Turf (4", 4"T, 6", 6"T, 8"T meter size)	
0 - 500,000 cf	**$0.00622**
500,001 - 1,666,700 cf	**0.00641**
Above 1,666,700 cf	**0.00798**

WATER RATES (continued)

Basic Charge Multi-Family Residential
Per residential unit **$11.15**

Basic Charge Domestic Irrigation **$61.83**
Resolution 99-108
On November 15, 1999 the Board approved customers who were presently on the Domestic Irrigation class of service to be grandfathered in tho the class as long as they own the property. Inheritance by a spouse will not change the class, sale of the property will.

Basic Charge Temporary Water Use Meter
Potable **$350.02**
* For bulk water fee, see AR 11010 Attachment A Fee Schedule

Basic Charge Private Fire Service

Basic Charge **N/A**

Commodity Charges (per cf consumed)	Rate per cf
Multi-family residential	
All water consumed	**$0.01243**
Domestic Irrigation	
0 - 6,500 cf	**$0.00142**
6,501 - 50,000 cf	**0.00157**
Above 50,000 cf	**0.00208**
Fire Hydrant/Construction	
All water consumed	**$0.02063**
Private Fire Service	
Wholesale (City of Placerville)	
0 - 295,500 cf	**$0.00498**

Note: Basic Charges for all services are billed bi-monthly.

		295,501 -12,160,000	**0.00563**
		Above 12,160,000	**0.00642**

RAW WATER RATES

Basic Charge		**Commodity Charges (per cf consumed)**	**Rate per cf**
	$70.29	**Metered Landscape Irrigation**	**$0.00129**
	$105.55	**Metered Landscape Irrigation (outside District)**	**$0.01815**
	$64.79	**Raw Water - 1/2" flow**	**N/A**
	$143.90	**Raw Water - 1" flow**	**N/A**
	$287.81	**Raw Water - 2" flow**	**N/A**
	$575.60	**Raw Water - 4" flow**	**N/A**
	N/A	**Raw Water - continuous flow**	**$0.00081**
	N/A	**Raw Water - continuous flow (outside District)**	**$0.00129**

RECYCLED WATER RATES

		Commodity Charges (per cf consumed)	**Rate per cf**
Basic Charge Dual Plumbed Residential	**N/A**	**Dual Plumbed Residential**	
		All water consumed	**$0.00723**
Basic Charge Commercial/Industrial/Landscape	**$125.08**	**Commercial/Industrial/Landscape**	
		All water consumed	**$0.00723**
Basic Charge Temporary Water Use Meter		**Fire Hydrant/Construction Recycled**	
Recylcled	**$377.63**	All water consumed	**$0.00930**

WASTEWATER RATES

		Commodity Charges (per cf consumed)	**Rate per cf**
Basic Charge (flat rate District average)	**$112.61**		**N/A**
Residential without winter calculation small farm, recreational turf domestic irrigation, sewer only			
Basic Charge Single Family Residential	**$67.24**	**Single Family Residential**	**$0.02520**
with winter calculation			
Basic Charge Multi-Family Residential	**$67.24**	**Multi-Family**	**$0.02520**
Per residential unit with winter calculation			
Basic Charge Commercial Industrial	**$60.66**	**Commercial Industrial**	
		Laundromat	**$0.03350**
		Repair Shop/Service Station	**$0.05042**
		Light Industrial	**$0.06747**
		Market	**$0.07235**
		Restaurant	**$0.09331**
		Other	**$0.04321**
Basic Charge Commercial			
without water service	**$70.99**		**N/A**
each additional unit	**$81.01**		**N/A**
Basic Charge School Wastewater	**N/A**	**School Wastewater (per student and staff)**	**$4.80**
billed annually			
Basic Charge Septage Transfer	**N/A**	**Septage Transfer (per 1000 gallon load)**	**$171.43**

Note: Basic Charges for all services are billed bi-monthly.

Appendix E – Administrative Regulation 1041

The District prohibits uses of District-supplied raw, potable, and recycled water that constitute water waste. The objective is to encourage reasonable use of water supplies by prohibiting all intentional or unintentional water waste, including the use of wasteful equipment or techniques, when a reasonable solution or alternative is available. See AR 5011 for additional water waste regulations that apply during declared drought conditions.

AR 1041.1 Definition of Water Waste

Any of the following acts or omissions, whether willful or negligent, shall constitute the waste of water.

A. Causing or permitting water to discharge, flow, or run to waste into any gutter, sanitary sewer, water course, or storm drain, or to any adjacent lot, from any tap, hose, faucet, pipe, sprinkler, or nozzle. In the case of irrigation, "discharge," "flow," or "run to waste" means that the earth intended to be irrigated has been saturated with water to the point that excess water flows over the earth to waste. In the case of washing, "discharge," "flow," or "run to waste" means that water in excess of that necessary to wash, wet or clean the dirty or dusty object, such as an automobile, sidewalk, or parking area, flows to waste.
B. Allowing water fixtures or heating or cooling devices to leak or discharge.
C. Maintaining ponds, waterways, decorative basins, or swimming pools without water recirculation devices.
D. Backwashing so as to discharge to waste swimming pools, decorative basins, or ponds in excess of the frequency reasonably necessary to maintain the clarity and cleanliness of the water.
E. Operation of an irrigation system that applies water to an impervious surface or that is in disrepair.
F. Use of a water hose not equipped with a control nozzle capable of completely shutting off the flow of water except when positive pressure to leave the hose on is applied.
G. Irrigation of landscaping during rainfall.
H. Overfilling of any pond, pool, or fountain that results in water discharging to waste.
I. Failure to comply with any mandatory actions during a District-declared drought.

AR 1041.2 Exceptions

Notwithstanding AR 1041.3, the following acts do not constitute the waste of water.

A. Flow resulting from temporary water supply system, water fixture, or heating/cooling device failures or malfunctions lasting 48 hours or less.
B. Flow resulting from firefighting or routine inspection of fire hydrants or from fire training activities.
C. Water applied to abate spills of flammable or other hazardous materials, where water is an appropriate abatement methodology.
D. Water applied to prevent or abate imminent health, safety, or accident hazards when alternate methods are not available.

AR 1041.3 Informing District Customers of the Regulation

The District shall inform customers at least once a year of the water waste regulation, either through a special item in the newsletter that accompanies each two-month bill or as a separate insert in the bill.

AR 1041.4 Enforcement

To enforce this regulation, District personnel will follow the process outlined in AR 1041.6, Penalties for Violation of the District's Water Waste Regulation.

AR 1041.5 Penalties for Violation of the District's Water Waste Regulation

District personnel may report or receive reports of violations of AR 1041, which prohibits uses of raw, potable, and recycled water that result in waste. In the case of the first reported failure to comply with the provisions of AR 1041, the District shall issue to the customer a written warning notice of the water waste violation. In the case of a second reported failure to comply, the District shall issue a second written notice and will levy a fine on the violator's water bill of $45, or 20% of the two-month water bill up to $100.00, depending upon the severity of the violation. Unpaid fines are subject to the property lien procedure of Water Code section 25806. Upon issuance of a third written notice of water waste within a twenty-four month period, the District may discontinue service of the water supply—raw, potable, or recycled water—that has been wasted.

If service is discontinued due to violations of this regulation, a reconnection fee of $100.00 per disconnection event will be charged. Reconnection will not take place until satisfactory remediation of the violation has occurred.

AR 1041.6 Appeal and Hearing

A customer may appeal any notice of water waste violation by filing a written request for a hearing with the District's General Counsel within seven calendar days after receiving the notice. The appeal shall identify the property and state the grounds of appeal together with all material facts in support of it. Appeals will be

heard by the General Counsel or her or his designee. The filing of a request for hearing shall stay any consequences for violation until the appeal is decided.

When a hearing is requested, the hearing officer shall send written notice to the appellant by certified mail, return receipt requested, stating the time and place of the hearing. Hearing procedures shall be informal, but serve the goals of proper decorum and the pursuit of the truth. At the hearing, the appellant shall have the right to present information as to the alleged facts upon which the notice was issued, and as to any other facts that may aid the hearing officer in determining whether a violation has occurred and, if so, the appropriate consequences.

Within ten calendar days after the close of the hearing, the hearing officer shall issue a written determination either upholding, reversing, or modifying the notice of water waste violation, and briefly stating the reasons that support the determination. Failure to issue a written determination within ten calendar days shall automatically reverse the notice of water waste violation. The hearing officer's written determination shall constitute the District's final action.

Appendix F – Annual Water Quality Report

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667
www.eid.org

2010 water testing results show that your water meets or exceeds health standards.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

2010 WATER QUALITY RESULTS...

Where your water comes from. EID has rights to approximately 77,590 acre-feet of water from various sources in the Sierra Nevada foothills. (An acre-foot equals one acre of land covered by a foot of water; there are 325,851 gallons in an acre-foot.) Jenkinson Lake, at the center of Sly Park Recreation Area, provides nearly one half of our water supply. Forebay Reservoir in Pollock Pines delivers water under a pre-1914 water right from the high-alpine streams and lakes that are part of our Project 184 hydropower system. We have a water contract with the Bureau of Reclamation at Folsom Lake, which Reclamation operates as part of the state's Central Valley Water Project. And we hold ditch water rights (Weber, Slab, and Hangtown creeks), water rights at Weber Reservoir, and a water right under Permit 21112 for Project 184 water—all of which is delivered from Folsom Lake.

Information about potential sources of pollution. The California Department of Public Health (CDPH) requires water providers to conduct a source water assessment to help protect the quality of water supplies. The assessment describes where a water system's drinking water comes from, the types of polluting activities that may threaten the quality of the source water, and an evaluation of the water's vulnerability to the threats.

Updated assessments of EID's drinking water sources were completed in October 2006 and October 2008. Our source water is considered most vulnerable to recreation, residential sewer, septic system, and urban runoff activities, which are associated with constituents detected in the water supply. Our source water is also considered most vulnerable to illegal activities, dumping, fertilizer, pesticide and herbicide application, forest activities, and wildfires, although constituents associated with these activities were not detected. Copies of the assessments are available at CDPH, Sacramento District Office, 1616 Capitol Avenue, Sacramento, CA 95899. To view them, contact Roxanne Cargill, CDPH Sacramento District Engineer, at 916-449-5668, or Dana Strahan, EID Drinking Water Division Operations Manager, at 530-642-4060.

Testing the water. To help ensure that safe water is delivered to our customers, EID's water-quality monitoring program includes taking samples of raw and treated water throughout the year from many locations in the District's service area. Analyses cover more than 100 different constituents. Analysis of the water is performed at state-certified commercial labs. The state of California allows us to monitor for some contaminants less than once a year because the concentrations of the contaminants do not change frequently. Some of our data, although representative, may be more than a year old. The table below lists all constituents that were detected in 2010 under our monitoring and testing program. The information shows that EID meets or exceeds all state and federal drinking water standards.

2010 RESULTS CHART

			El Dorado Main Water System		Outingdale Water System		Strawberry Water System			
General Properties	Units	MCL (SMCL) [PHG]	Range	Average	Range	Average	Range	Average	Most Recent Sampling Date	Typical source of contaminant
Alkalinity	mg/L	–	15-29	21	20-48	30	9-18	13	2010	
Bicarbonate	mg/L	–	18-29	22	20-32	27	11-15	13	2010	
Bromide	mg/L	–	ND-0.12	0.01	–	–	–	–	2010	
Calcium	mg/L	–	2.7-6.7	4.4	3.3-6.2	5.2	7.2-7.9	7.5	2010	
Chloride	mg/L	(500)	1.1-7.4	4.3	1.7	1.7	2.9	2.9	2010	Runoff/leaching from natural deposits; seawater influence
Corrosivity	Aggressive Index	Non-corrosive	9.3-10.2	9.7	9.98	9.98	8.85	8.85	2010	
Hardness	mg/L	–	10-20	16	15	15	6.1	6.1	2010	
Hardness (grains per gallon)	gpg	–	0.58-1.18	0.94	0.88	0.88	0.36	0.36	2010	
Magnesium	mg/L	–	ND-110	4.2	1.1	1.1	0.16	0.16	2010	
N-nitrosodimethylamine (NDMA)	µg/L	–	ND-0.003	ND	–	–	–	–	2010	
Orthophosphate	mg/L	–	ND-1.0	0.18	ND	ND	ND	ND	2010	
pH (pH Units)	Units	–	6.8-8.1	7.7	7.5-8.0	7.9	7.2-7.9	7.5	2010	
Sodium	mg/L	–	2.1-7.0	4.9	3.6	3.6	2.4	2.4	2010	
Specific Conductance	umho/cm	(1600)	50-72	64	51-61	58	56-61	58	2010	Substances that form ions when in water
Sulfate	mg/L	(500)	ND-2.4	0.9	0.75	0.75	ND	ND	2010	Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids	mg/L	(1000)	24-76	45	37	37	10	10	2010	Runoff/leaching from natural deposits
Inorganics										
Aluminum	mg/L	1 (0.20) [0.6]	ND	ND	ND	ND	0.061	0.061	2010	Erosion of a natural deposits; residue from some surface water treatment processes
Zinc	mg/L	5.0	ND-0.13	0.07	ND	ND	ND	ND	2010	Runoff/leaching from natural deposits; industrial waste
Microbiological		PHG (MCLG)	MCL (MRDL)	Highest Monthly Level Found	MCL (MRDL)	Highest Monthly Level Found	MCL (MRDL)	Highest Monthly Level Found		
Total Coliform Bacteria	% of Samples	(0)	No more than 5% postive monthly sample	<1%	No more than 1 postive monthly sample	0.0%	No more than 1 postive monthly sample	0.0%	2010	Naturally present in environment
Disinfection By-Products Precursors		Action Level	Range	Lowest Running Annual Average	Range	Highest Running Annual Average	Range	Highest Running Annual Average		
Total Organic Carbon	mg/L	TT=Removal	0.8-3.0	NA	–	NA	–	NA	2010	Various natural and man-made sources
Total Organic Carbon Removal Ratio	%	TT=<1.0	NA	0.73 *	–	NA	–	NA	2010	Various natural and man-made sources
Disinfection By-Products		MCL (MRDL)	Range	Highest Running Annual Average	Range	Highest Running Annual Average	Range	Highest Running Annual Average		
Chlorine (as Cl_2)	mg/L	(4.0)	0.56-1.39	0.78	0.79-1.27	0.96	0.74-1.03	0.93	2010	Drinking water disinfectant added for treatment
Total Haloacetic Acids (HAA5)	µg/L	60	12-89	43.7	21	21	35	35	2010	By-product of drinking water disinfection
Total Trihalomethanes	µg/L	80	30-100	50.3	24	24	39	39	2010	By-product of drinking water disinfection
Lead and Copper		Action Level	90th Percentile	No. of sites sampled/ No. exceeding action level	90th Percentile	No. of sites sampled/ No. exceeding action level	90th Percentile	No. of sites sampled/ No. exceeding action level		
Lead (at the tap)	µg/L	15	ND	51/0	5.4	10/1	ND	10/1	2008	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (at the tap)	mg/L	1.3	0.24	51/0	0.076	10/0	0.21	10/0	2008	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

		El Dorado Main Water System			Outingdale Water System			Strawberry Water System				
	Units	MCL	Maximum Value	Lowest Monthly % samples meeting requirements	MCL	Maximum Value	Lowest Monthly % samples meeting requirements	MCL	Maximum Value	Lowest Monthly % samples meeting requirements		Typical source of contaminant
Turbidity	NTU	TT=95% of samples ≤0.3 NTU	0.16	100%	TT=95% of samples ≤0.3 NTU	0.30	100%	TT=95% of samples ≤0.1 NTU	0.10	100%	2010	Soil runoff

...MEET OR EXCEED HEALTH STANDARDS

A note for sensitive populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. EID is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, test methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, or at http://www.epa.gov/safewater/lead.

Questions?

For more information from EID about this report, contact Dana Strahan, Water Division Operations Manager, at 530-642-4060.

For information from the California Department of Public Health, contact Roxanne Cargill, CDPH Sacramento District Engineer, at 916-449-5668. **Safe Drinking Water Hotline**: 1-800-426-4791

Editing: Mary Lynn Carlton and Jesse Saich
Design: Jesse Saich

The following definitions help explain information in the table.

Maximum contaminant level (MCL): The highest level of a contaminant allowed in drinking water. Primary MCLs are set as close to the PHG or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCL) are set to protect the odor, taste, and appearance of drinking water.

Maximum contaminant level goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. The U.S. Environmental Protection Agency (EPA) sets these levels.

Maximum residual disinfectant level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Primary drinking water standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public health goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. The California Environmental Protection Agency sets PHGs.

Regulatory action level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements for water systems.

Treatment technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

* *Summary Information For Operating Under an Extension*

In July 2010, the quarterly Total Organic Carbon (TOC) monitoring results indicated EID did not reduce the required percentage amount of TOC as required by drinking water regulations. In September 2010, the California Department of Public Health (CDPH) granted an extension until July 2011 for this requirement to demonstrate this treatment technique infraction was due to an analytical testing error and not a failure of our water treatment process. All samples collected after July 1, 2010 demonstrate we were able to achieve the required percent reduction for TOC. If you have any questions or concerns about this extension, please contact Roxanne Cargill, CDPH Sacramento District Engineer, at 916-449-5668 or Dana Strahan, EID Drinking Water Division Operations Manager, at 530-642-4060.

Key:

NA=not applicable
ND=not detected
NR=not reportable
NTU=nephelometric turbidity unit (measure of clarity)
mg/L=milligrams/liter
µg/L=micrograms/liter
umho/cm = micromhos per centimeter

WHAT THE STATE WANTS YOU TO KNOW

California's Department of Public Health requires all public water systems to include the following information in their yearly consumer confidence reports.

About drinking water
The sources of drinking water—both tap and bottled—include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

The following contaminants may be present in source water before it is treated.

Microbial contaminants such as viruses and bacteria from sewage treatment plants, septic systems, livestock operations, and wildlife.
Inorganic contaminants such as salts and metals that occur naturally or stem from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.
Pesticides and herbicides from sources such as agriculture, urban stormwater runoff, and residential uses.
Organic chemical contaminants such as synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production or that come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.
Radioactive contaminants that occur naturally or are the result of oil and gas production and mining.

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency and the California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

NOTE: Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Contact the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 for more about contaminants and potential health effects.

We urge visitors to area lakes and rivers to help stop the spread of invasive quagga and zebra mussels. These small creatures have wreaked havoc east of the Mississippi and are now found in many states in the west, including California. To learn more about what you can do, visit the EID website at www.eid.org.

CIP PROJECTS KEEP THE SYSTEM GOING STRONG

Maintaing a reliable, efficient water distribution system to ensure adequate service capacity now and in the future is a major focus at EID. Every year we take a look at long-term needs to maintain and improve our infrastructure. This planning process, which extends out five years, results in capital improvement plan (CIP) projects. These long-term projects include budget estimates for everything from treatment plant upgrades and pipeline improvements to flume replacements and sewer collection system repairs, and much more.

The Flume 9 replacement project is one such project. It consisted of replacing 142 feet of degraded wooden flume with precast concrete flume sections, the removal of hazardous rocks and trees, the installation of rock anchors and wire mesh drapery, as well as installation of subsurface drainage.

The flume project is part of the District's long-term rehabilitation program for the 22.3-mile El Dorado Canal, which delivers drinking water to customers throughout the District's service area and supplies water to generate renewable hydroelectric power. EID associate engineer Daryl Noel told the Board that the "cost of the project came in at $1.9 million, approximately $100,000 under budget estimates."

To read about other CIP projects, go to the District's document library and read the 2011–2015 CIP.

Contractor prepares to use a helicopter to fly in precast flume sections for placement

"Maintaining a reliable, efficient water distribution system to ensure adequate service capacity now and in the future is a major focus at EID."

Appendix G – CUWCC BMP Retail Coverage Report 2009 - 2010

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Agency: El Dorado Irrigation District **District Name:** El Dorado Irrigation District **CUWCC Unit #:** 6293

Retail

Primary Contact Sharon Fraser **Telephone** 530-642-4112 **Email:** sfraser@eid.org

Compliance Option Chosen By Reporting Agency:
(Traditional, Flex Track or GPCD)
GPCD if used:

GPCD in 2010	253
GPCD Target for 2018	230

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	271	100%	281
2012	2	92.8%	261	96%	271
2014	3	89.2%	250	93%	261
2016	4	85.6%	240	89%	250
2018	5	82.0%	230	82%	230

Not on Track if 2010 GPCD is ≥ than target

GPCD in 2010	253
Highest Acceptable GPCD for 2010	281

On Track

Agency: El Dorado Irrigation District | District Name: El Dorado Irrigation District | CUWCC Unit #: 6293
Retail

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operational Practices

		2009	2010	
1.Conservation Coordinator provided with necessary resources to implement BMPs?	Name	Sharon Fraser	Sharon Fraser	Conservation Coordinator provided with necessary resources to implement BMPs?
	Title	Water Conservation Coordinator	Water Conservation Coordinator	
	Email		sfraser@eid.org	
		On Track	On Track	

2. Water waste prevention documentation

Descriptive File	0		
Descriptive File 2010		0	On Track if any one of the 6 ordinance actions done, plus documentation or links provided
URL	EID adopted Administrative Regulation No. 1041 - Water		
URL 2010		http://www.eid.org/doc_lib/02_dist_info/AR1041-Rev-2_20090327.pdf	
Describe Ordinance Terms	EID adopted Administrative Regulation No. 1041 - Water		
Describe Ordinance Terms 2010		EID adopted Administrative Regulation No. 1041 - Water Waste Prohibition - in February 2008. This regulation is within the legal authority	
	On Track	On Track	

Agency: El Dorado Irrigation District District Name: El Dorado Irrigation District CUWCC Unit #: 6293
Retail

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

BMP 1.2 Water Loss Control

	2009		
Complete a prescreening Audit	yes	On Track	On Track if Yes
Metered Sales	32,141		
Verifiable Other Uses	194		
Total Supply	40,660		
(Metered Sales + System uses)/ Total Supply >0.89	0.80	Not on Track	On Track if =>.89, Not on Track if No
If ratio is less than 0.9, complete a full scale Audit in 2009?	Yes	On Track	On Track if Yes
Verify Data with Records on File?	Yes	On Track	On Track if Yes
Operate a system Leak Detection Program?	Yes	On Track	On Track if Yes

	2010		
Compile Standard Water Audit using AWWA Software?	Yes	On Track	On Track if Yes, Not on Track if No
AWWA file provided to CUWCC?	EID_EID_6293_2010_AWWA_WaterAudit.xls	On Track	On Track if Yes, Not on Track if No
AWWA Water Audit Validity Score?	78		Info only until 2012
Completed Training in AWWA Audit Method?	yes		
Completed Training in Component Analysis Process?	No		Info only until 2012
Complete Component Analysis?	No		Info only until 2012
Repaired all leaks and breaks to the extent cost effective?	Yes	On Track	On Track if Yes, Not on Track if No
Locate and repair unreported leaks to the extent cost effective.	Yes	On Track	On Track if Yes, Not on Track if No
Maintain a record-keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.			Info only until 2012
Provided 7 types of Water Loss Control Info			Info only until 2012

Leaks Repaired	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost of Interventions	Water Saved
709	$ 563,598	$ 416,963	0	Yes	$ -	0

Agency: El Dorado Irrigation District District Name: El Dorado Irrigation District CUWCC Unit #: 6293
Retail

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

1.3 METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS

If signed MOU prior to 31 Dec 1997, On Track if all connections metered; If signed after 31 Dec 1997, complete meter installations by 1 July 2012 or within 6 yrs of signing and 20% biannual reduction of unmetered connections.

	2009		2010		
Exemption or 'At least as Effective As' accepted by CUWCC					
Numbered Unmetered Accounts	138	Not onTrack	0	On Track	On Track if no unmetered accounts
Metered Accounts billed by volume of use	Yes	On Track	Yes	On Track	Volumetric billing required for all connections on same schedule as metering
Number of CII accounts with Mixed Use meters	1,404		1,196		Info only
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	On Track	No	On Track	Info only, due 2011
Feasibility Study provided to CUWCC?	No	On Track	No	On Track	Info only, due 2011
Completed a written plan, policy or program to test, repair and replace meters	Yes	On Track	Yes	On Track	On Track if Yes, Not on Track if No

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Agency: El Dorado Irrigation District **District Name:** El Dorado Irrigation District **CUWCC Unit #:** 6293
Retail Coverage Report Date: June 15, 2011

Primary Contact Sharon Fraser **Email:** sfraser@eid.org

1.4 Retail Conservation Pricing

Metered Water Rate Structure

Date 2009 data received June 1, 2011
Date 2010 data received June 1, 2011

On Track if: Increasing Block, Uniform, Allocation, Standby Service; Not on Track if otherwise

Customer Class	2009 Rate Type	Conserving Rate?	Customer Class	2010 Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes	Single-Family	Increasing Block	Yes
Multi-Family	Uniform	Yes	Multi-Family	Uniform	Yes
Commercial	Uniform	Yes	Commercial	Uniform	Yes
Dedicated Irrigation	Increasing Block	Yes	Dedicated Irrigation	Increasing Block	Yes
Agricultural	Increasing Block	Yes	Agricultural	Increasing Block	Yes
	On Track			On Track	

Year Volumetric Rates began for Agencies with some Unmetered Accounts

Info only

Agencies with Partially Metered Service Areas: If signed MOU prior to 31 Dec. 1997, implementation starts no later than 1July 2010. If signed MOU after 31 Dec. 1997, implementation starts no later than 1July 2013, or within seven years of signing the MOU,

Agency: El Dorado Irrigation District
Retail

District Name: El Dorado Irrigation District

CUWCC Unit #: 6293

Coverage Report Date: June 15, 2011

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Adequacy of Volumetric Rates) for Agencies with No Unmetered Accounts

Customer Class	2009 Rate Type	2009 Volumetric Revenues $1000s	2010 Rate Type	2010 Volumetric Revenues $1000s
Single-Family	Increasing Block	$ 11,603	Single-Family	$ 8,863
Multi-Family	Uniform	$ 883	Multi-Family	$ 754
Commercial	Uniform	$ 1,799	Commercial	$ 815
Dedicated Irrigation	Increasing Block	$ 390	Dedicated Irrigation	$ 814
Agricultural	Increasing Block	$ 241	Agricultural	$ 223
Other		$ 360		$ 306
Select a Customer Type		$ -		$ -
Total Revenue Commodity Charges (V):		$ 15,276		$ 11,775
Total Revenue Fixed Charges (M):		$ 7,547		$ 5,887
Calculate: V / (V + M):		67%		67%
		On Track		On Track

Agency Choices for rates:

A) Agencies signing MOU prior to 13 June2007, implementation starts 1 July2007: On Track if (V / (V + M) ≥ 70% x .8 = **56% for 2009** and 70%x0.90 = **63% for 2010**; Not on track if (V / (V + M)) < 70%;

B) Use Canadian model. Agencies signing MOU after 13June2007, implementation starts July 1 of year following signing.

	2009	2010
Canadian Water & Wastewater Rate Design Model Used and Provided to CUWCC	No	No
	On Track	On Track
If Canadian Model is used, was 1 year or 3 year period applied?		

Wastewater Rates

	2009		2010
Does Agency Provide Sewer Service?	Yes	If 'No', then wastewater rate info not required.	Yes

Customer Class	2009 Rate Type	Conserving Rate?	Customer Class	2010 Rate Type	Conserving Rate?
Single-Family	Uniform	Yes	Single-Family	Uniform	Yes
Multi-Family	Uniform	Yes	Multi-Family	Uniform	Yes
Commercial	Uniform	Yes	Commercial	Uniform	Yes
Other	Select a Rate Structure		Other	Select a Rate Structure	
	Select a Rate Structure			Select a Rate Structure	
	Select a Rate Structure			Select a Rate Structure	
	Select a Rate Structure			Select a Rate Structure	
	On Track			On Track	

On Track if: 'Increasing Block', 'Uniform', 'based on long term marginal cost' or 'next unit of capacity'

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

BMP 2. EDUCATION PROGRAMS

BMP 2.1 Public Outreach Actions Implemented and Reported to CUWCC

	2009	2010
1) Contacts with the public (minimum = 4 times per year)	12	16
2) Water supplier contacts with media (minimum = 4 times per year, i.e., at least quarterly).	24	14
3) An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly).	Yes	Yes
4) Description of materials used to meet minimum requirement.	Newsletter articles on conservation Website Email Messages General water conservation information Articles or stories resulting from outreach News releases Newspaper contacts Written editorials	Newsletter articles on conservation Newsletter articles on conservation Website Email Messages Articles or stories resulting from outreach News releases Radio contacts Select a type of media contact
5) Annual budget for public outreach program.	$ 70,547	$ 119,039
6) Description of all other outreach programs	Description is too large for text area. Data will be stored in the BMP Reporting database when online.	Description is too large for text area. Data will be stored in the BMP Reporting database when online.
	On Track	On Track

All 6 action types implemented and reported to CUWCC to be 'On Track')

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

2.2 School Education Programs Implemented and Reported to CUWCC

	2009	2010	
Does a wholesale agency implement School Education Programs for this unility's benefit?	Yes	Yes	
Name of Wholesale Supplier?	Sacramento Regional Water Authority	Sacramento Regional Water Authority	
1) Curriculum materials developed and/or provided by agency	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • Student contests for K-4th grades and 5t	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • Student contests for K-4th grades and 5t	Yes/ No
2) Materials meet state education framework requirements and are grade-level appropriate?	Yes	Yes	All 5 actions types implemented and reported to CUWCC to be
3) Materials Distributed to K-6?	Yes	Yes	
Describe K-6 Materials	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • K-4 will receive a class set of "Water C	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • K-4 will receive a class set of "Water C	Describe materials to meet minimum requirements
Materials distributed to 7-12 students?	Yes	Yes	Info Only
4) Annual budget for school education program.	$ 24,000	$ 24,000	
5) Description of all other water supplier education programs	Educational materials are available to all local schools and youth programs within the EID service area and the City of Placerville. The materials include interactive classroom booklets for students (K-8) concerning water conservation, the water cycle, wa	Educational materials are available to all local schools and youth programs within the EID service area and the City of Placerville. The materials include interactive classroom booklets for students (K-8) concerning water conservation, the water cycle, wa	
	See Wholesale Report 0 On Track	See Wholesale Report 0 On Track	

Appendix H – Examples of Water Conservation Flyers and Education Programs

Household Water Efficiency

Outdoor Self Survey

Ask yourself the following:	Did you know?
 Are you sweeping walkways, patios, and driveways instead of using a hose?	Sweeping hard surfaces is good exercise and can save up to 100 gallons of water.
 Are lawns and shrubs watered only when they need it?	Check lawns and shrubs before watering. A lawn that springs back after being stepped on does not need water. Shrubs may only need occasional deep watering during the summer.
 Are you watering early in the morning or late in the evening? Is there a layer of mulch around plants, shrubs, and trees?	Watering during the day causes the water to evaporate and not soak into the soil. A 4" layer of mulch will help plant roots stay cool and hold moisture in the soil; saving water and suppressing weed growth.
 Is the water left running while you wash your car?	Use a bucket and a hose with a shutoff nozzle when washing your car. Open hoses can waste up to 10 gallons of water per minute.
 Is your swimming pool covered?	Reduce evaporation up to 80% and the need to add water by using a pool cover. It will also save on heating costs.

For assistance contact El Dorado Irrigation District's Office of Water Efficiency
by phone at 530.642.4126; by e-mail at officeofwaterefficiency@eid.org;
or by mail at 2890 Mosquito Road, Placerville, CA 95667.

When washing dishes by hand, don't let the water run while rinsing. Fill one sink with wash water and the other with rinse water.

Run your washing machine and dishwasher only when they are full and you could save 1000 gallons a month.

Use the garbage disposal sparingly. Compost instead and save gallons every time.

Keep a pitcher of water in the refrigerator instead of running the tap for cold drinks, so that every drop goes down you not the drain.

Wash your produce in the sink or a pan that is partially filled with

Collect the water you use for rinsing produce and reuse it to water houseplants.

When you shop for a new appliance, consider one offering cycle and load size adjustments. They are more water and energy-efficient than older appliances.

Time your shower to keep it under 5 minutes. You'll save up to 1000 gallons a month.

Put food coloring in your toilet tank. If it seeps into the toilet bowl, you have a leak. It's easy to fix, and you can save more than 600 gallons a month.

Grab a wrench and fix that leaky faucet. It's simple, inexpensive, and can save 140 gallons a week.

When doing laundry, match the water level to the size of the load.

Teach your children to turn the faucets off tightly after each use.

Before you lather up, install a low-flow showerhead. They're inexpensive, easy to install, and can save your family more than 500 gallons a week.

Soak your pots and pans instead of letting the water run while you scrape them clean.

Install an instant water heater on your kitchen sink so you don't have to let the water run while it heats up. This will also reduce heating costs for your household.

Insulate hot water pipes so you don't have to run as much water to get hot water to the faucet.

Drop that tissue in the trash instead of flushing it and save gallons every time.

Wash clothes only when you have a full load and save up to 600 gallons each month.

Listen for dripping faucets and toilets that flush themselves. Fixing a leak can save 500 gallons each month.

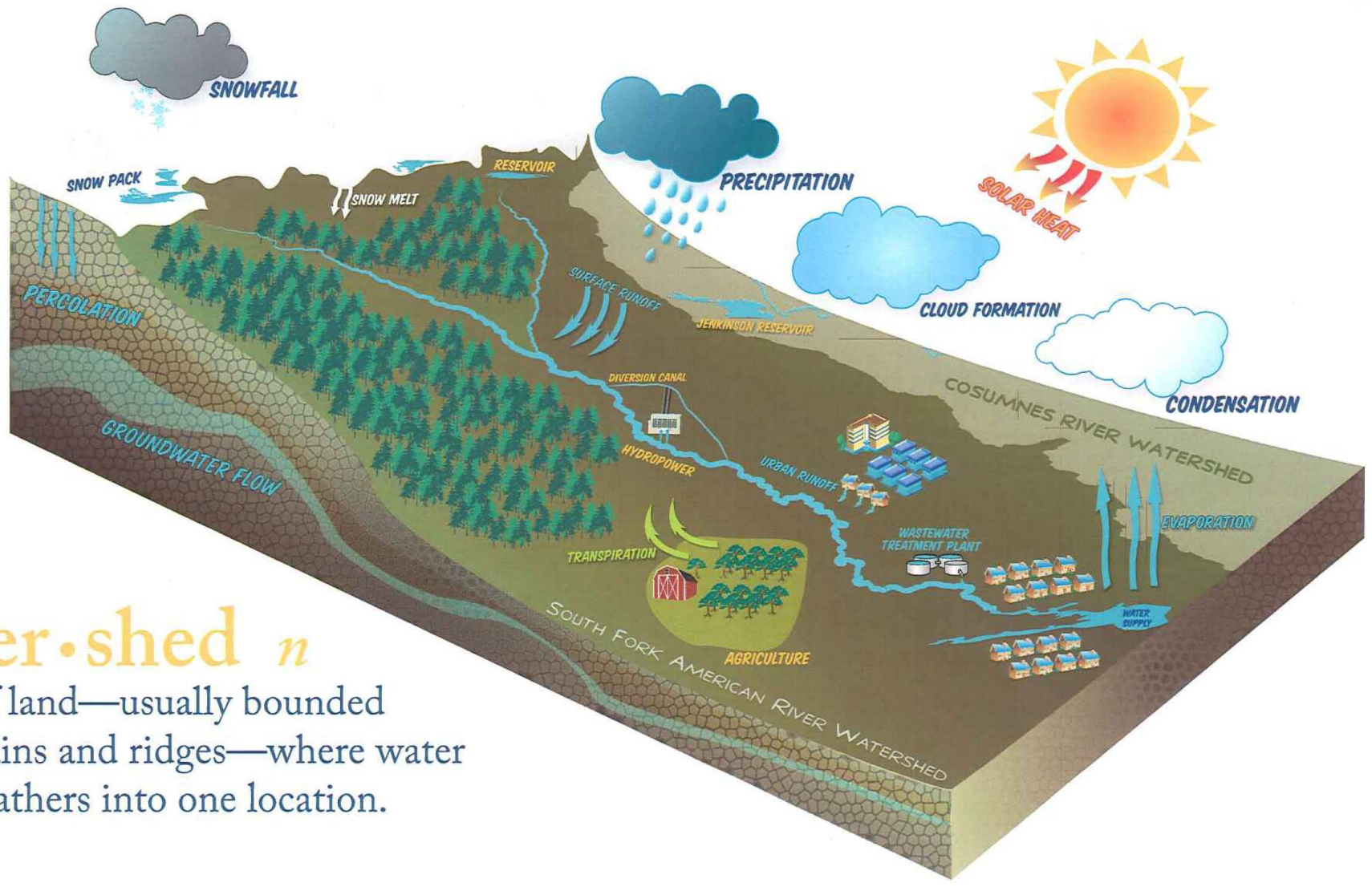
Cook food in as little water as possible. This will also retain more of the nutrients.

Choose new water-saving appliances, like washing machines that save up to 20 gallons per load.

Turn off the water while you shave and you can save more than 100 gallons a week.

...remember to close the tap

SOUTH FORK AMERICAN RIVER WATERSHED



wa·ter·shed *n*

An area of land—usually bounded by mountains and ridges—where water falls and gathers into one location.

EL DORADO IRRIGATION DISTRICT

Watershed Word Challenge

Hint: Do the word search first!

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667
530-622-4513 or 916-965-0930
www.eid.org

1. An area of land—usually bounded by mountains and ridges—where water falls and gathers into one location is called a _ _ _ _ _ _ _ _ _ _.

2. The _ _ _ _ _ _ _ _ _ _ _ are the highest part of a watershed, and where the watershed begins.

3. Water can fall as rain or snow—these are both forms of _ _ _ _ _ _ _ _ _ _ _ _ _ _.

4. When water molecules (not water drops!) become airborne because of heat and/or wind, this process is called _ _ _ _ _ _ _ _ _ _ _.

5. When precipitation soaks into the soil rather than flowing into a drain, lake, or other water body, this is called _ _ _ _ _ _ _ _ _ _ _ _.

6. A _ _ _ _ _ _ _ is the natural home of an animal or plant.

7. Water that flows over the surface of the land, rather than soaking into the ground, is called _ _ _ _ _ _, and can sometimes carry pollutants from city streets into local rivers and streams.

WATERSHED WORD SEARCH

u	h	e	a	d	w	a	t	e	r	s	x	g	x	e
n	g	p	r	e	c	i	p	i	t	a	t	i	o	n
m	o	r	h	y	f	o	i	n	m	m	w	k	s	e
w	j	i	o	n	z	m	f	f	u	z	c	t	v	f
a	q	f	s	u	e	h	s	i	h	m	n	a	f	f
t	h	r	m	o	n	y	c	l	r	e	p	o	w	e
e	m	e	a	g	r	d	l	t	i	o	n	b	u	v
r	e	s	s	q	q	e	w	r	r	u	k	o	j	r
s	t	e	q	m	a	u	t	a	r	l	f	l	i	e
h	s	r	n	r	t	u	t	t	t	i	p	h	k	s
e	y	v	f	q	n	i	h	i	v	e	e	i	g	e
d	s	o	u	s	o	i	k	o	x	n	r	r	g	r
x	o	i	e	n	b	m	o	n	g	v	r	f	q	p
p	c	r	f	e	v	j	p	a	w	e	h	e	q	f
q	e	o	t	a	t	i	b	a	h	w	a	h	m	g

ecosystem
erosion
evaporation
ground water
habitat
headwaters
infiltration
nutrients
precipitation
preserve
reservoir
runoff
watershed

8. The "system" of relationships between animals and plants and their environment is called the _ _ _ _ _ _ _ _ _.

9. _ _ _ _ _ _ _ _ _ is the gradual wearing away of rocks or soil by the action of water, ice, or wind.

10. _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ is underground water that is held in the soil and rocks.

11. _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ are the building blocks which plants and animals need to live or grow.

12. We need to _ _ _ _ _ _ _ _ _ _ _ _ the high quality of the water coming out of the Sierra Nevada, California's watershed!

13. A _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ is a "reserve" of something; the Sierra snow pack is a water reserve for California.

Appendix I – CUWCC 2020 GPCD Target Calculator

California Urban Water Conservation Council

2020 GPCD Target Calculator v1.5

This spreadsheet-based calculator is designed to help urban retail water suppliers establish a 2020 water use target

The methodologies contained herein are consistent with the publication *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*, the purpose of which is to ensure the consistent implementation of the Water Conservation Act of 2009.

Name of City or Utility:	El Dorado Irrigation District		
Name of Contact:	Sharon Fraser, Water Conservation Coordinator	Telephone:	530-642-4112
Email:	sfraser@eid.org	Ext:	none
Reporting Period:	Calendar Year (Jan-Dec)		
Beginning Month:	January		

Guidance & Instructions

This GPCD target calculator is designed to enable the user to generate and select a 2020 water use target
Only systems serving more than 3,000 end users, or that supply more than 3,000 acre-feet of potable water annually at r
for municipal purposes need to develop a target.
Please note the following items:

All data entry is required to be in units of **Acre-feet**, unless indicated otherwise.

Cells shown in this color are for data entry.

Cells shown in this color are calculated fields and cannot be changed or overwritten.

○ ◉ Option buttons for user selection.

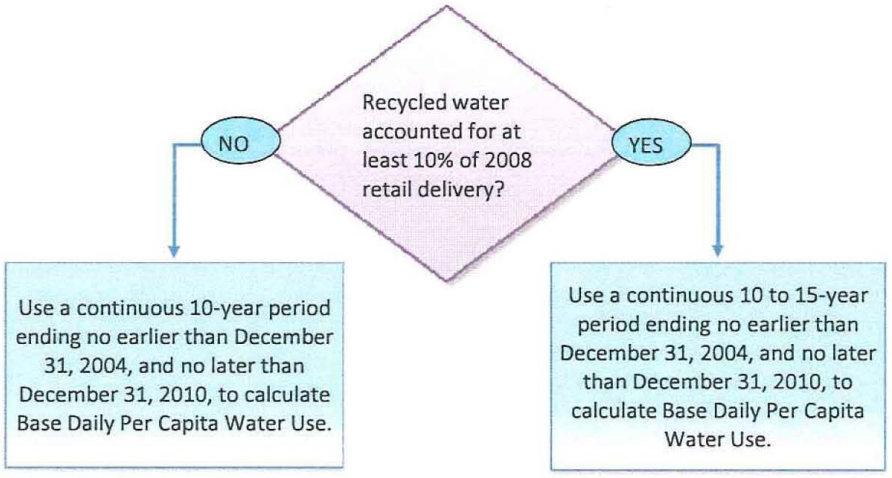
Please read before data entry begins...
Establishing a baseline period is a key step in developing a 2020 water use target. The choice of baseline period is dependent on the result of evaluating 2008 recycled water use against water delivered and the result of this test will determine, to some extent, the timeframe for required data input. Please see below for more details...

Data can be input monthly, or annually; the monthly totals will override the annual totals. However, when entering monthly data, ensure all month fields are completed.
Do NOT leave blanks. For zero enter "0".
If any month is left blank, all other monthly data for that year will be ignored and the annual total will be used.

Cells shown in this color warn the user that monthly data has been left blank and therefore other monthly data entered for the year will be ignored.

User tips... User tips are shown in these boxes.

The flow chart below shows how the result of evaluating 2008 recycled water against water delivered impacts the choice of baseline periods and required data input.



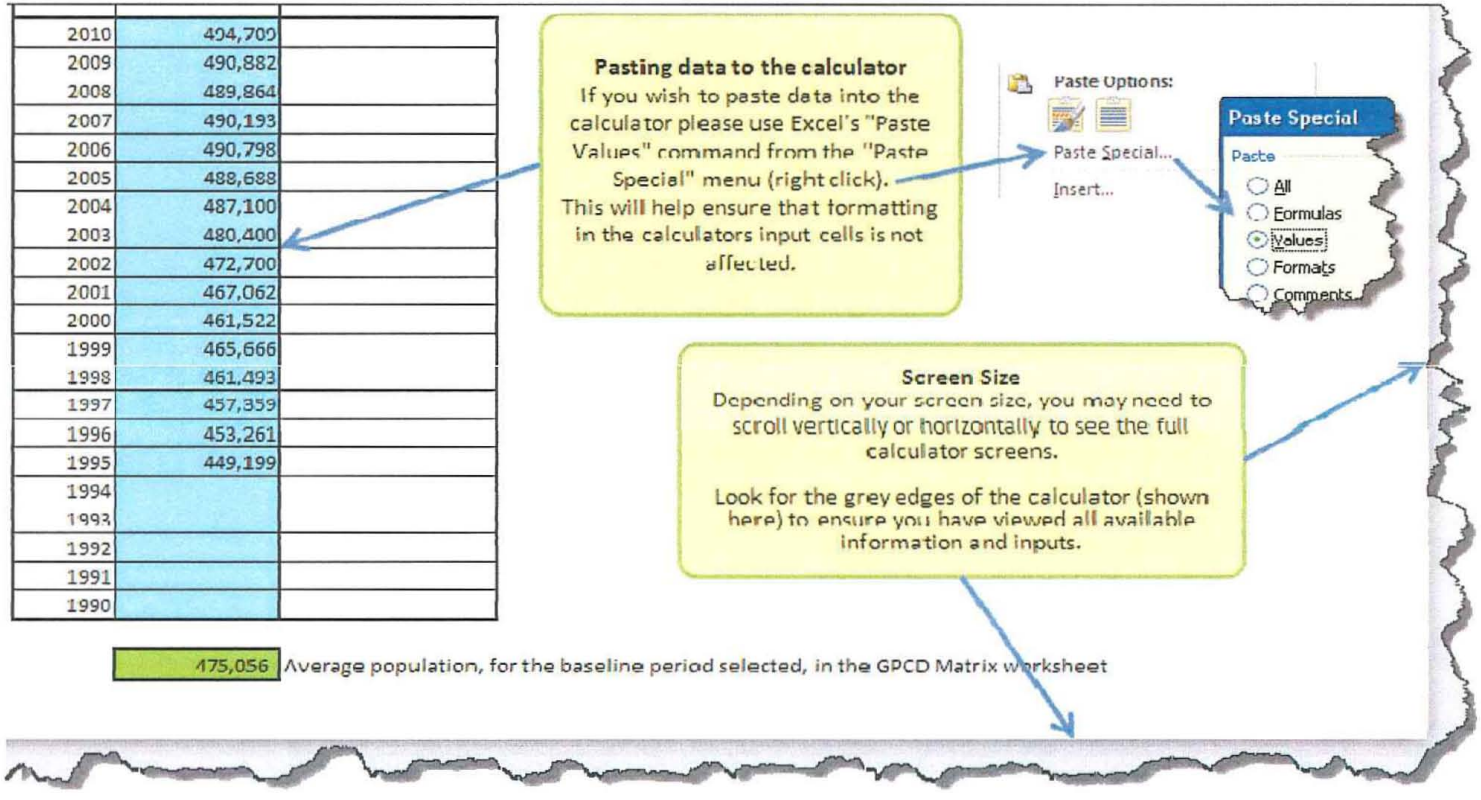
Select a Baseline period and ending year and the intersection of the highlighed row and column indicates the earliest year required for data entry.

Ending ...		Baseline 10-years	Baseline 11-years	Baseline 12-years	Baseline 13-years	Baseline 14-years	Baseline 15-years
		◉	○	○	○	○	○
2010	○	2001	2000	1999	1998	1997	1996
2009	○	2000	1999	1998	1997	1996	1995
2008	○	1999	1998	1997	1996	1995	1994
2007	○	1998	1997	1996	1995	1994	1993
2006	○	1997	1996	1995	1994	1993	1992
2005	○	1996	1995	1994	1993	1992	1991
2004	◉	**1995**	1994	1993	1992	1991	1990

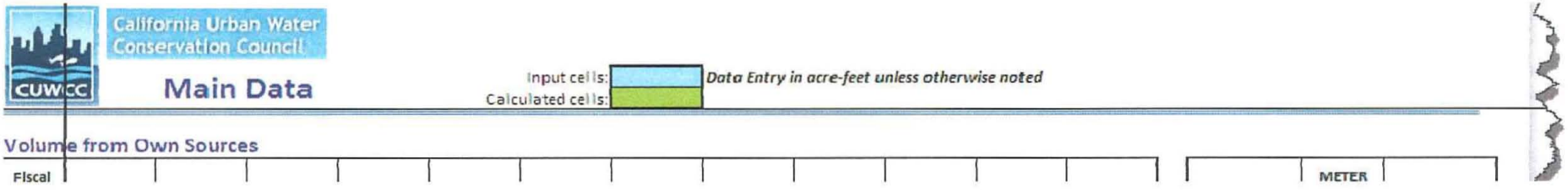
California Urban Water Conservation Council

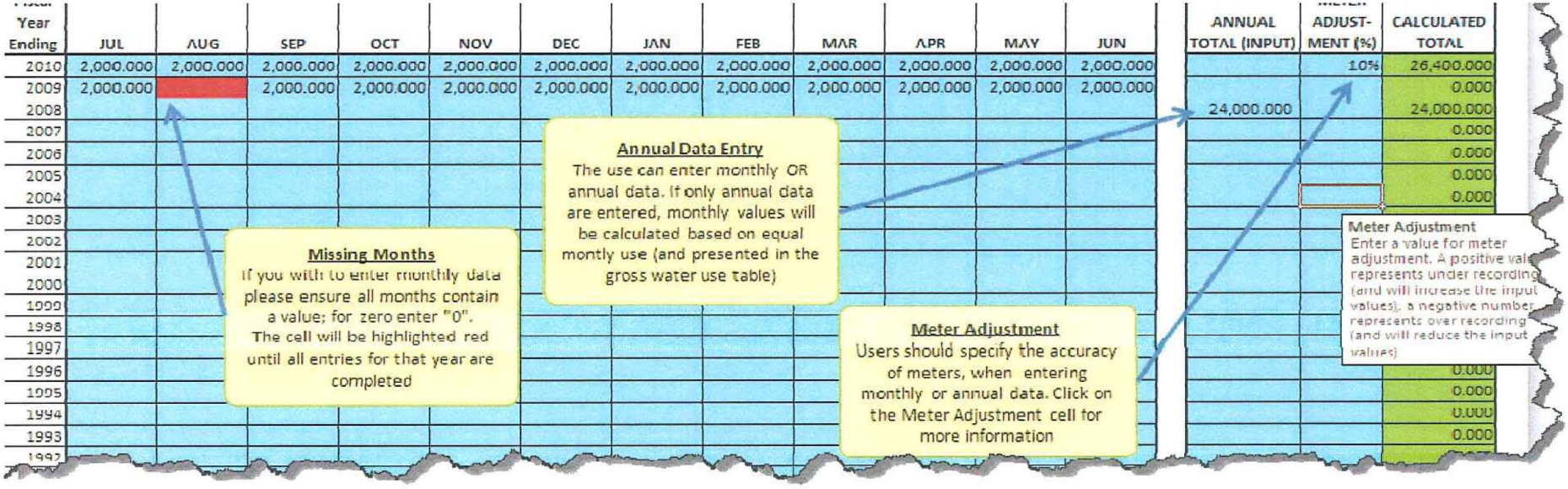
Hints and Tips for Using the GPCD Calculator

Hints and Tips Common to all worksheets:



Hints and Tips for the Main Data worksheet:




Year Ending
JUL
AUG
SEP
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
ANNUAL TOTAL (INPUT)
ADJUST-MENT (%)
CALCULATED TOTAL
2010 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 1.0% 26,400.000
2009 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 2,000.000 0.000
2008 24,000.000 24,000.000
2007 0.000
2006 0.000
2005 0.000
2004 0.000
2003
2002
2001
2000
1999
1998
1997
1996 0.000
1995 0.000
1994 0.000
1993 0.000
1992
Missing Months
If you with to enter monthly data please ensure all months contain a value; for zero enter "0". The cell will be highlighted red until all entries for that year are completed
Annual Data Entry
The use can enter monthly OR annual data. If only annual data are entered, monthly values will be calculated based on equal montly use (and presented in the gross water use table)
Meter Adjustment
Users should specify the accuracy of meters, when entering monthly or annual data. Click on the Meter Adjustment cell for more information
Meter Adjustment
Enter a value for meter adjustment. A positive value represents under recording (and will increase the input values). a negative number represents over recording (and will reduce the input values)

California Urban Water Conservation Council

Main Data

Input cells:
Calculated cells:

Data Entry in acre-feet unless otherwise noted

Volume from Own Sources

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST-MENT (%)	CALCULATED TOTAL
2010													37,704.000		37,704.000
2009															0.000
2008															0.000
2007															0.000
2006													42,699.000		42,699.000
2005													39,847.000		39,847.000
2004													44,954.000		44,954.000
2003													34,540.000		34,540.000
2002													38,686.000		38,686.000
2001													38,848.000		38,848.000
2000													37,442.000		37,442.000
1999													35,643.000		35,643.000
1998													28,424.000		28,424.000
1997													32,304.000		32,304.000
1996															0.000
1995															0.000
1994															0.000
1993															0.000
1992															0.000
1991															0.000
1990															0.000

Volume from Imported Sources

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST-MENT (%)	CALCULATED TOTAL
2010															0.000
2009															0.000
2008															0.000
2007															0.000
2006													0.000		0.000
2005													0.000		0.000
2004													0.000		0.000
2003													0.000		0.000
2002													0.000		0.000
2001													0.000		0.000
2000													0.000		0.000
1999													0.000		0.000
1998													0.000		0.000
1997													0.000		0.000
1996															0.000
1995															0.000
1994															0.000
1993															0.000
1992															0.000
1991															0.000
1990															0.000

Volume of Water Exported to Another Water Utility or Jurisdiction

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST-MENT (%)	CALCULATED TOTAL
2010													1,166.000		1,166.000
2009															0.000
2008															0.000
2007															0.000
2006													1,672.000		1,672.000
2005													1,666.000		1,666.000
2004													1,811.000		1,811.000
2003													1,709.000		1,709.000
2002													1,696.000		1,696.000
2001													1,669.000		1,669.000
2000													1,637.000		1,637.000
1999													1,575.000		1,575.000
1998													1,464.000		1,464.000
1997													1,548.000		1,548.000
1996															0.000
1995															0.000
1994															0.000
1993															0.000
1992															0.000
1991															0.000
1990															0.000

Recycled Water Delivered

NOTE: Only 2008 recycled water delivered is required; other years are optional

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST-MENT (%)	CALCULATED TOTAL
2010															0.000
2009															0.000
2008													3,957.000		3,957.000
2007															0.000
2006															0.000
2005															0.000
2004															0.000
2003															0.000
2002															0.000
2001															0.000
2000															0.000
1999															0.000
1998															0.000
1997															0.000
1996															0.000
1995															0.000
1994															0.000
1993															0.000
1992															0.000
1991															0.000
1990															0.000

Change in Distribution System Storage

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010												
2009												
2008												
2007												
2006												
2005												
2004												
2003												
2002												
2001												
2000												
1999												
1998												
1997												
1996												
1995												
1994												
1993												
1992												
1991												
1990												

Year	ANNUAL CHANGE IN STORAGE	CALCULATED Net Change in Storage
2010		0.000
2009		0.000
2008		0.000
2007		0.000
2006		0.000
2005		0.000
2004		0.000
2003		0.000
2002		0.000
2001		0.000
2000		0.000
1999		0.000
1998		0.000
1997		0.000
1996		0.000
1995		0.000
1994		0.000
1993		0.000
1992		0.000
1991		0.000
1990		0.000

Indirect Recycled Water Use

(use this calculator to help generate values)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1999	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1998	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1997	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1995	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1994	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1992	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1991	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1990	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Year	ANNUAL TOTAL (INPUT)	CALCULATED TOTAL
2010		0.000
2009		0.000
2008		0.000
2007		0.000
2006		0.000
2005		0.000
2004		0.000
2003		0.000
2002		0.000
2001		0.000
2000		0.000
1999		0.000
1998		0.000
1997		0.000
1996		0.000
1995		0.000
1994		0.000
1993		0.000
1992		0.000
1991		0.000
1990		0.000

Water Delivered for Agricultural Use (values entered will be subtracted from base daily GPCD water use)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST-MENT (%)	CALCULATED TOTAL
2010													4,089.000		4,089.000
2009															0.000
2008															0.000
2007															0.000
2006													5,156.000		5,156.000
2005													4,713.000		4,713.000
2004													6,368.000		6,368.000
2003													5,233.000		5,233.000
2002													5,787.000		5,787.000
2001													6,312.000		6,312.000
2000													5,158.000		5,158.000
1999													5,466.000		5,466.000
1998													4,407.000		4,407.000
1997													5,523.000		5,523.000
1996															0.000
1995															0.000
1994															0.000
1993															0.000
1992															0.000
1991															0.000
1990															0.000

Industrial Process Water Delivered (values entered will be subtracted from base daily GPCD water use and baseline CII GPCD)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL (INPUT)	METER ADJUST-MENT (%)	CALCULATED TOTAL
2010															0.000
2009															0.000
2008															0.000
2007															0.000
2006															0.000
2005															0.000
2004															0.000
2003															0.000
2002															0.000
2001															0.000
2000															0.000
1999															0.000
1998															0.000
1997															0.000
1996															0.000
1995															0.000
1994															0.000
1993															0.000
1992															0.000
1991															0.000
1990															0.000

Gross Water Use

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL USAGE
2010	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	2,704.083	32,449.000
2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2006	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	2,989.250	35,871.000
2005	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	2,789.000	33,468.000
2004	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	3,064.583	36,775.000
2003	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	2,299.833	27,598.000
2002	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	2,600.250	31,203.000
2001	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	2,572.250	30,867.000
2000	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	2,553.917	30,647.000
1999	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	2,383.500	28,602.000
1998	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	1,879.417	22,553.000
1997	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	2,102.750	25,233.000
1996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1995	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1994	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1993	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1992	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1991	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1990	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

California Urban Water Conservation Council

Population

Input cells:
Calculated cells:

Enter population data for the service area.

YEAR	POPULATION	
2010	114,700	
2009		
2008		
2007		
2006	110,200	
2005	108,300	
2004	104,700	
2003	101,100	
2002	96,400	
2001	93,300	
2000	90,100	
1999	87,800	
1998	86,000	
1997	83,100	
1996		
1995		
1994		
1993		
1992		
1991		
1990		

Please note:

The GPCD calculation is very sensitive to errors in population. Please review the guidance document ***Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*** for additional information and direction in order to acquire the most accurate population estimates.

Population data are only required for years that contain water use data.

If you see "<--Enter Population" this indicates you have entered water use data for this timeframe but not population. Please add population data to enable a calculation of GPCD and associated targets.

96,100 Average population, for the baseline period selected, in the GPCD Matrix worksheet

California Urban Water Conservation Council

This worksheet can be used as a calculator to generate an annual total for each year of input to the Main Data worksheet: (see here)

Annual Deductable Volume of Indirect Recycled Water Entering Distribution System

Data Entry in acre-feet unless otherwise noted

Input cells:
Calculated cells:

Surface Reservoir Augmentation	N/A	N/A	Volume Discharged from Reservoir for Distribution System Delivery	Recycled Water Blend %	Recycled Water Delivered to Treatment Plant	Use Default ☐ 3% Transmission / Treatment Loss %	Transmission / Treatment Losses	Volume entering Distribution System
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Source 1								
Source 2								
Source 3								
Source 4								
Source 5								
						Subtotal Reservoir Augmentation (A):		0.000

Groundwater Recharge	5-Year Annual Average Recharge	Use Default ☐ 90% Recharge Recovery Factor	Recycled Water Pumped from Basin	Utility Pumping as % of Basin Total	Recycled Water Pumped by Utility	Use Default ☐ 3% Transmission / Treatment Loss %	Transmission / Treatment Losses	Volume entering Distribution System
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Basin 1								
Basin 2								
Basin 3								
Basin 4								
Basin 5								
						Subtotal Groundwater Recharge (B):		0.000
						Deductable Volume of Indirect Recycled Water Entering Distribution System (A+B):		0.000

Transfer this value back to the Main Data worksheet

California Urban Water Conservation Council

GPCD Matrix

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL GPCD
2010	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6
2009													
2008													
2007													
2006	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6
2005	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9
2004	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6	313.6
2003	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7	243.7
2002	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0
2001	295.4	295.4	295.4	295.4	295.4	295.4	295.4	295.4	295.4	295.4	295.4	295.4	295.4
2000	303.7	303.7	303.7	303.7	303.7	303.7	303.7	303.7	303.7	303.7	303.7	303.7	303.7
1999	290.8	290.8	290.8	290.8	290.8	290.8	290.8	290.8	290.8	290.8	290.8	290.8	290.8
1998	234.1	234.1	234.1	234.1	234.1	234.1	234.1	234.1	234.1	234.1	234.1	234.1	234.1
1997	271.1	271.1	271.1	271.1	271.1	271.1	271.1	271.1	271.1	271.1	271.1	271.1	271.1
1996													
1995													
1994													
1993													
1992													
1991													
1990													

Recycled water accounts for 0 % of 2008 deliveries, therefore select a a 10 year baseline period using the selection buttons below

Baseline Ending In...		Baseline 10-years	N/A	N/A	N/A	N/A	N/A
		◉	○	○	○	○	○
2010	○	280.1					
2009	○	287.4					
2008	○	287.8					
2007	○	281.9					
2006	◉	**280.8**					
2005	○	279.7					
2004	○	280.2					

Min Value Max Value

	Ending in...	Baseline 5-years
◉	2010	271.6
○	2009	283.2
○	2008	293.3
○	2007	280.9

Base daily per capita water use (10-15yr baseline)	280.8
Base daily per capita water use (5yr baseline)	271.6

User selection buttons:
Use the buttons to indicate the chosen baseline period

California Urban Water Conservation Council

TARGETS / COMPLIANCE
(CUWCC MOU)

Baseline / Initial GPCD
(Use option buttons to select)

GPCD in 2006 ○	290.6
Baseline GPCD (1997 to 2006) ◉	280.8
GPCD in 2010	252.6
GPCD Target for 2018	230.2

Potable Water GPCD for each Year in the Baseline Period

Year	GPCD
2006	290.6
2005	275.9
2004	313.6
2003	243.7
2002	289.0
2001	295.4
2000	303.7
1999	290.8
1998	234.1
1997	271.1

Biennial GPCD Compliance Table

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	270.7	100%	280.8
2012	2	92.8%	260.6	96.4%	270.7
2014	3	89.2%	250.5	92.8%	260.6
2016	4	85.6%	240.3	89.2%	250.5
2018	5	82.0%	230.2	82.0%	230.2

Monthly GPCD Data for Weather Normalization

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6	252.6
Baseline avg*	280.8	280.8	280.8	280.8	280.8	280.8	280.8	280.8	280.8	280.8	280.8	280.8

* The average for each month is based on the baseline period 1997 to 2006

California Urban Water Conservation Council

TARGETS / COMPLIANCE
(SBx7-7)

Input cells:
Calculated cells:

Target Summary	2020	2015
Method 1	224.6	252.7
Method 2	N/A	N/A
Method 3	N/A	N/A
Method 4	0.0	0.0
	Min Value	Max Value

GPCD in 2010	252.6
Base daily per capita water use (10-15yr baseline)	280.8
Base daily per capita water use (5yr baseline)	271.6
Max. allowable GPCD target in 2020 (95% x 5yr baseline)	258.0

Method 1: Baseline per Capita Water Use

80% x Base daily per capita water use (10-15yr baseline): 224.6

2015 Target: 252.7
2020 Target: 224.6

Method 2: Performance Standards

TM 2 Indoor Water Use allowance: 0.0
TM 6 Landscaped Area Water Use: 0.0
TM 7 Baseline CII Water Use: 0.0

2015 Target: N/A
2020 Target: N/A

Method 3: Hydrologic Region Targets

Enter the percentage of your service area population in each hydrologic region

Region	Region Name	% Population	GPCD Target
1	North Coast		137
2	San Francisco Bay		131
3	Central Coast		123
4	South Coast		149
5	Sacramento River		176
6	San Jacinto		174
7	Tulare lake		188
8	North Lahontan		173
9	South Lahontan		170
10	Colorado River		211
		0.0%	

2015 Target: N/A
2020 Target: N/A

Method 4:

To be Developed

Appendix J – Regional Water Authority Water Efficiency Program

RWA Water Efficiency Program
Fiscal Year 2012
Category 1 Business Plan

INTRODUCTION

The Regional Water Authority (RWA) Water Efficiency Program (WEP) priorities include assisting participating agencies in compliance with conservation requirements of the following: California Urban Water Conservation Council (CUWCC), Water Forum Agreement Water Conservation Element, U.S. Bureau of Reclamation conservation requirements, and SBX7 7.

The WEP consists of two categories of programs to achieve these priorities:

- **Category 1 Program** consists of core subscription services that address water efficiency activities common to all participants. Category 1 programs are designed to benefit the entire WEP membership. Participating WEP members fund Category 1 through annual dues to support staff and other direct costs of program implementation.

- **Category 2 Programs** are specialized subscription services offering additional water efficiency programs beyond Category 1 programs. Category 2 programs are structured as "pay for services" programs and benefit only those WEP members who committed financially to participate in the programs. Supplementary funding supports Category 2 programs and these resources may come from the U.S. Bureau of Reclamation, California Department of Water Resources, Sacramento Regional County Sanitation District, Sacramento Municipal Utility District, Pacific Gas & Electric Company and other resources as available.

The WEP Category 1 Program is subject to approval of an annual business plan including scope, budget and fee schedule for member participation. To develop the Fiscal Year (FY) 2012 WEP Category 1 Business Plan, staff discussed their plan with the RWA Executive Committee on March 23, 2011 and solicited feedback from the Regional Water Efficiency Program Advisory Committee (RWEPAC) on May 10, 2011. Based on feedback, the WEP Category 1 Business Plan for Fiscal Year 2012 will focus on the following areas:

1) Analyzing 2010 Urban Water Management Plans (UWMPs) and 2009-10 CUWCC BMP reports.
2) Complying with the CUWCC's public information and school education BMP's through a regional program.
3) Detailed program implementation and activity reporting and grant implementation and activity reporting, including water savings.
4) Identifying and assisting with regional grant writing efforts.

The top priority for FY12 is the review of current and planned future conservation activities discussed in the UWMPs of the current 19 RWA members. This review will enable RWA to best plan for the next 3-5 years of the Regional Water Efficiency Program. The information collected will specifically help RWA to understand the current baseline gallons per capita per day (gpcd) usage for each member's service area, and which conservation best management practices (BMPs) will be emphasized to meet Senate Bill (SB) 7x-7 targets. Another key outcome of this planning effort is preparation for the next round of Prop 84 and other grant opportunities. In

addition, data from the UWMPs will support the regional public outreach efforts (e.g., sharing with media the regional statistics on current and forecasted water supply and demands and planned conservation and recycling programs).

BUDGET SUMMARY

To implement the priorities under the Category 1 Program, a budget including $471,000 in planned expenses is proposed. Total planned revenues for FY12 include $387,000 in member fees and an estimated $69,000 from grants, $9,500 encumbered from School Education funds from FY2011, and $5,500 from WEP Cash reserves, for a total of $471,000.

Table 1. Budget Summary	
Program Revenues	
Projected FY 2012 Category 1 Income	387,000
Grant Revenue DWR Drought Assistance	60,000
Grant Revenue EPA Grant (Green Gardener Program)	9,000
Revenues	**456,000**
Encumbered School Education funds from FY11	9,500
Total from Cash Reserves	5,500
Total Revenues	**471,000**

Program Expenses	
Program Management and Implementation, Technical Assistance	
Staff, Legal, and Audit Services	199,000
Consulting Services	40,000
Foundational BMP 2. Education Programs	
Public Outreach	166,000
School Education	34,000
Programmatic BMP's Support	
Landscape	23,000
EPA funded Green Gardener Program/RWA Cost Share	9,000
Total Expenses	**471,000**

FY 2012 PROGRAM MANAGEMENT ACTIVITIES

Category 1 program management activities for FY12 are designed to assist participating agencies in complying with conservation requirements and increase public support for water conservation. Staff activities are outlined in Table 2. Some activities include the use of RWA staff and others may include the use of consultant support. While maintaining existing partnerships and contractual obligations, we will continue to represent the region in statewide initiatives and forums and report back to WEP participants. Staff will serve as a regional spokesperson and respond to water conservation related media requests.

Working with the Water Forum and water agency staff, RWA staff plans to assist participants in conservation program development and reporting. Assistance may include: (1) review or help in determining BMP compliance targets for CUWCC tracks and SBx7-7 as agencies engage in their own annual conservation program planning; (2) suggestions for quantification of water savings associated with targets to meet GPCD reduction goals; and (3) information sharing to determine cost effectiveness and BMP program costs, including RWA support for planned CUWCC training in cost effectiveness.

In ongoing support of the CUWCC MOU implementation, RWA will continue to organize and provide data for foundational BMP's and programmatic BMP's as applicable from WEP Category 1 and 2 programs (e.g.; clothes washer rebates, toilet rebates, CII rebates, etc.).

TABLE 2. Category 1 Program Management Activities

Staff Activity	Description
BMP Compliance Assistance and Reporting	• Organize and provide reporting data for BMP programs that RWA provides implementation services for (e.g., Foundational BMP 2 – Education). • Additional data provided for Programmatic BMP's as applicable from WEP Category 2 programs (e.g.; toilet rebates, clothes washer rebates, etc.). • Manage the regional public information and school education programs (Foundational BMP 2 programs).
Coordinate Grant Efforts, Grant Writing Assistance and Reporting	• Identify and assist with regional grant writing efforts to build financial investments through regional grants and cost sharing opportunities. • Coordinate outside contract support to follow up as needed. • Track and report on grant programs for member agencies and funding agencies.
Technical Assistance	• Long range regional program planning beginning with analyzing agency 2010 UWMP's and 2009-10 CUWCC reports and aims to support future grant applications (e.g., Prop 84 and USBR). • Compile or develop regional statistics, data and other appropriate information, including review of SB 7x-7 implementation targets. • Support for member agency's quantification of water savings associated with targets. • Provide review and technical assistance with BMP program costs quantification, cost-effectiveness analysis, and cost-benefit analysis.
Building and Maintaining Partnerships	• Maintain contact with Landscape Organizations (CLCA, UC Extension/Master Gardeners, River Friendly Landscape Program) • Coordinate outside contract support to follow up with partnership activities as needed.

Regional Representation to Key State and Local Agencies and Organizations	• Attend Water Forum meetings, committees, and plenary. • Participate in CUWCC Board Meetings, participate on select committees, and track BMP modifications and identify opportunities for regional implementation. • Participate on California Irrigation Institute Board, AWWA, others as available.

FY 2012 FOUNDATIONAL BMP 2 EDUCATIONAL PROGRAMS

WEP Category 1 activities for FY12 are designed to fully implement CUWCC Foundational BMP 2 Educational requirements for program participants. Program tasks and budget estimates are outlined in Table 3 below.
Since the public outreach campaign and RWA's fiscal year are not on the same cycle, funds remaining in the FY11 budget will be encumbered for 2012. Working with the outreach consultant and the Public Outreach Committee, we will complete the second year of our successful Blue Thumb public outreach campaign, evaluate the campaign's effectiveness after reviewing results of the planned telephone survey, and refresh the Blue Thumb campaign for future years. Specific details of the refreshed campaign will be developed by the outreach consultant and the Public Outreach Committee based on survey results and overall review of campaign goals.

FY2011/2012 will be an ambitious year for the school education component of RWA's Water Efficiency Program. We propose continued activities with our established partners, the Sacramento Bee, through the Media in Education (M.I.E.) Program, and Project WET (Water Education for Teachers) through the Water Education Foundation. The basic purpose of these efforts is to meet the California Urban Water Conservation Council's Best Management Practice's baseline requirement for school education and ultimately to reduce water use in our region. The committee's goal for next year is to increase involvement of both students and teachers in the various activities that comprise RWA's Water Efficiency School Program. The School Education Committee recommends hiring a part-time education consultant to focus on the following program goals: (1) Increase student and teacher participation in water efficiency programs by 10% per year; (2) Provide and/or support up to 4 teachers workshops annually; (3) Reach 10% of all the region's 5th grade classrooms per year for the next 10 years with the Environmental Education Initiative state adopted curriculum; (4) Create and organize capacity building opportunities and partnerships for member agencies and their school districts; (5) Develop and implement a Water Awareness PSA/Video contest as a new component of Sacramento Bee's M.I.E. program; and (6) Advance future strategies for RWA's Water Efficiency school education program with the school committee.

FY 2012 identifies $ 24,500 in the school education budget to be used for this purpose.

Table 3. BMP Program Implementation Activities – Foundational BMP 2. Education Programs		**$200,000**
PUBLIC OUTREACH AND EDUCATION		**TOTAL $200,000**
Regional Outreach Campaign "Blue Thumb"	Refresh Blue Thumb common message and branding	146,000
	Media Buys and Marketing (i.e.; TV and Radio ads, PSA's)	
	Collateral materials (i.e.; lawn signs, gloves, t-shirts, other)	
	Outreach Consultant and additional partnerships	
	River Cats Partnership beginning April 2012	10,000
Other Outreach Activities	Reprinting, Redesign, order new publications as needed	5,000
	Gardensoft Gallery on RWA website	5,000
SCHOOL EDUCATION		
School Education	Newspapers in Education - Grades K- 8	6,500
	Encumbered FY11 for Develop School Education Program	9,500
	Develop School Education Program/Consultant	15,000
	Project WET workshops	3,000

FY 2011 PROGRAMMATIC BMP's SUPPORT

Programmatic support for FY2012 is designed to assist participating agencies in implementing and promoting Programmatic BMP's 3 and 5, (Residential and Landscape), while satisfying additional requirements for the Outreach BMP. Expenses for these activities are summarized in Table 4.

This year's activities consist of partnering with the UC Cooperative Extension (UCCE) for homeowner and Master Gardener workshops, sponsorship of EcoLandscape of California's bi-annual conference for landscape professionals, updating the Water Wise Gardening in the Gold Country Region web site, and conducting the Green Gardener Training Program in English and Spanish. The Green Gardener Training Program is sponsored in part by grant funding from the EPA Climate Showcase Communities Grant awarded to the Sacramento County Stormwater Department.

In addition to the expense activities above, RWA plans to work with the Landscape Committee and consultant to leverage momentum of existing landscape community relationships by hosting a booth a at the Sacramento Landscape and Nursery Expo in January 2012 and work with the City of Roseville to develop a Green Gardener Training Program for Homeowners.

Table 4. Programmatic BMP's Supported Sponsorships (BMP 3 and 5)

BMP EXPENSES	**TOTAL $32,000** **GRANT FUNDED $9,000**
Green Gardener Training Program Materials	$5,000
Landscape Consultant/Green Gardener Program Manager	$15,000
EcoLandscape of California Sponsorship	$500
UC Cooperative Extension	$2,500
Green Gardener Training Program RWA Cost share for EPA grant	$9,000

Appendix K – Board Resolution

RESOLUTION OF THE BOARD OF DIRECTORS OF EL DORADO IRRIGATION DISTRICT ADOPTING A REVISED 2010 FIVE-YEAR WATER MANAGEMENT PLAN UPDATE FOR THE EL DORADO IRRIGATION DISTRICT

WHEREAS, Section 210 of the Reclamation Reform Act of 1982 (Public Law 97-293) and the Central Valley Project Improvement Act of 1992 requires districts having repayment or water supply contracts with the United States Bureau of Reclamation (USBR) to develop and maintain water management plans containing definite goals, appropriate water conservation measures, metering and time schedules for meeting conservation objectives; and

WHEREAS, the El Dorado Irrigation District has such a USBR contract and has therefore prepared a water management plan; and,

WHEREAS, on December 12, 2011 the Board of Directors adopted Resolution 2011-025 accepting and adopting the 2010 USBR Five-Year Water Management Plan Update (2010 Update); and

WHEREAS, the USBR subsequently requested certain revisions to the 2010 Update, and District staff has made the revisions requested; and

WHEREAS, the Board of Directors accepts the revised 2010 Update prepared by District staff;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of El Dorado Irrigation District as follows:

The revised 2010 USBR Five-Year Water Management Plan Update is hereby adopted by the El Dorado Irrigation District.

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The foregoing Resolution was introduced at a regular meeting of the Board of Directors of EL DORADO IRRIGATION DISTRICT, held on the 10th day of September 2012, by Director Wheeldon, who moved its adoption. The motion was seconded by Director Fraser, and a poll vote taken which stood as follows:

AYES: Directors Wheeldon, Fraser, Osborne, and George

NOES:

ABSENT: Director Day

ABSTAIN:

The motion having a majority of votes "Aye", the resolution was declared to have been adopted, and it was so ordered.

Bill George, President
Board of Directors
EL DORADO IRRIGATION DISTRICT

ATTEST:

Jennifer Sullivan
Clerk to the Board
EL DORADO IRRIGATION DISTRICT

(SEAL)

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I, the undersigned, Clerk to the Board of EL DORADO IRRIGATION DISTRICT hereby certify that the foregoing resolution is a full, true and correct copy of a Resolution of the Board of Directors of EL DORADO IRRIGATION DISTRICT entered into and adopted at a regular meeting of the Board of Directors held on the 10th day of September 2012.

Jennifer Sullivan
Clerk to the Board
EL DORADO IRRIGATION DISTRICT

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References

Water Diversion Report, El Dorado Irrigation District, Reporting Year: 2010

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